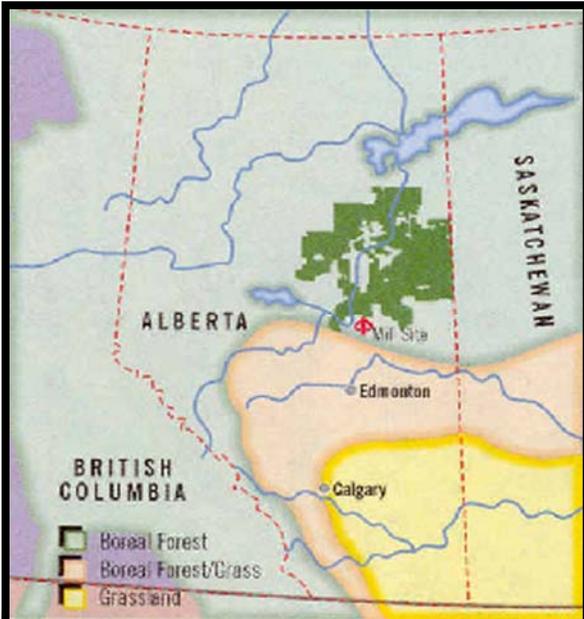


# Alberta-Pacific FMA Area Landbase Determination Process



ALBERTA-PACIFIC  
FOREST INDUSTRIES INC.



Ed Bobocel Lumber



**Vanderwell**  
CONTRACTORS (1997) LTD.

**Alberta Plywood Ltd.**



St. Jean Lumber (1984) LTD



**Prepared for:**

**Alberta-Pacific Forest Industries Inc.  
P.O. Box 8000  
Boyle, Alberta  
T0A 0M0**

**(Completed May 2003 -  
Updated 2007)**



ALBERTA-PACIFIC  
FOREST INDUSTRIES INC.

**Prepared by:**

**Timberline Forest Inventory Consultants Ltd.  
Suite 315, 10357 - 109th St.  
Edmonton, AB  
T5J 1N3**





## Table of Contents

<b>TABLE OF CONTENTS .....</b>	<b>I</b>
<b>LIST OF FIGURES .....</b>	<b>III</b>
<b>LIST OF TABLES .....</b>	<b>III</b>
<b>LIST OF APPENDICES .....</b>	<b>III</b>
<b>1 LANDBASE DETERMINATION .....</b>	<b>1</b>
<b>1.1 Inventory Background .....</b>	<b>2</b>
1.1.1 Softcopy Alberta Vegetation Inventory (SAVI) .....	2
<b>1.2 Forest That Prohibits Timber Harvesting .....</b>	<b>2</b>
1.2.1 Private land .....	2
1.2.2 Protected Notations .....	3
1.2.3 Provincial Parks & Natural Areas .....	3
1.2.4 Aboriginal Reserves, Ecological Reserves .....	4
1.2.5 Swan Buffer .....	4
1.2.6 Bigstone Cree Nation Traditional Land Entitlement Layer .....	4
1.2.7 Liege River Area (Proposed) .....	5
1.2.8 Athabasca and Clearwater Breaks (Deciduous Only) .....	5
<b>1.3 Inoperable or Isolated Stands .....</b>	<b>7</b>
1.3.1 Non-Forest Exclusions .....	7
1.3.2 Subjective Deletions .....	8
1.3.3 Sensitive Slopes .....	10
1.3.4 Isolated Stands .....	11
<b>1.4 Operating Ground Rules .....</b>	<b>12</b>
1.4.1 Watercourse Buffers .....	12
1.4.2 Integrated Resource Plan (IRP) Buffers .....	15
<b>1.5 Integration of Recent Landscape Disturbances .....</b>	<b>16</b>
1.5.1 Recent Fire Activity (Burns) .....	16
1.5.2 FireSmart .....	16
1.5.3 Oil & Gas Activity (Seismic / Well Site / Pipe Lines) .....	18
1.5.4 Harvesting Activity (Cutblocks) .....	20
<b>1.6 Integration of Landscape Planning Information .....</b>	<b>24</b>
1.6.1 FMA / FMUs / Operating Units .....	24
1.6.2 Natural Sub-Region .....	24
1.6.3 Maintain Our Forest (MOF) Blocks .....	25
1.6.4 Grazing Leases .....	25
1.6.5 Planned Harvest Blocks / Areas (2006+) .....	25
1.6.6 Summer Ground Classification .....	26
1.6.7 Caribou Zones and Ungulate Winter Zones .....	27
1.6.8 Alberta Pacific Planning Units .....	28

1.6.9	MOSA Area – Future Development Areas.....	29
<b>1.7</b>	<b>GIS Processing and Sliver Polygon Removal.....</b>	<b>29</b>
<b>1.8</b>	<b>Development of the Netdown Database.....</b>	<b>30</b>
1.8.1	Develop Yield Classes.....	31
1.8.2	Apply Exclusion Rules.....	34
1.8.3	Horizontal Stand Adjustment .....	35
1.8.4	Landbase Assignments.....	35
1.8.5	Stand Age Assignments.....	36
1.8.6	Net Area Determination .....	37
1.8.7	Adjust Cutblock Classification.....	37
1.8.8	Generate Final Netdown Summary .....	37

## List of Figures

FIGURE 1-1. OVERVIEW OF J AND 'NON-J' AREAS ALONG WITH STATUS OF ORIGINAL AVI APPROVAL PROCESS...	2
FIGURE 1-2. OVERVIEW OF 'NON-J' INVENTORY SOURCES .....	3
FIGURE 1-3. DISTRIBUTION OF EXCLUSIONS (USES THAT PROHIBIT TIMBER HARVESTING) ON FMA AREA.....	6
FIGURE 1-4. ISOLATED STANDS ANALYSIS IMPLEMENTED ACROSS THE FMA AREA. ....	11
FIGURE 1-5. A REPRESENTATION OF PROTECTIVE WATERCOURSE BUFFERS APPLIED WITHIN FMA AREA. ....	13
FIGURE 1-6. PROTECTIVE WATERCOURSE BUFFERS ACROSS FMA AREA. ....	14
FIGURE 1-7. DISTRIBUTION OF IRP BUFFERS IDENTIFIED IN BIG BEND IRP WITHIN FMU S7J. ....	15
FIGURE 1-8. DISTRIBUTION OF RECENT FIRES ACROSS FMA AREA. ....	17
FIGURE 1-9. OVERVIEW OF OIL AND GAS EXCLUSIONS ACROSS FMA AREA. ....	19
FIGURE 1-10. INFORMATION SOURCES USED IN CAPTURING CUTBLOCK INFORMATION. ....	20
FIGURE 1-11. DISTRIBUTION OF EXISTING HARVEST ACTIVITY ACROSS AVI FMUS. ....	21
FIGURE 1-12. CUTBLOCK STRATA AND AGE ASSIGNMENT RULES.....	23
FIGURE 1-13. DISTRIBUTION OF INTEGRATED LANDSCAPE PLANNING AREAS ACROSS THE FMA AREA.....	26
FIGURE 1-14. DISTRIBUTION OF CARIBOU ZONES AND UNGULATE WINTER ZONES INFORMATION ACROSS THE FMA AREA.....	27
FIGURE 1-15. DISTRIBUTION OF ALBERTA-PACIFIC'S PLANNING UNITS ACROSS THE FMA AREA.....	28
FIGURE 1-16. MOSA AREA WITHIN FMU A15.....	29

## List of Tables

TABLE 1-1. SUMMARY OF AVI STATUS FOR FMUS WITHIN THE FMA.....	1
TABLE 1-2. SUMMARY OF AVI STATUS FOR 'NON-J' AREA.....	1
TABLE 1-3. NON-FOREST LAND CLASSES DEFINED USING AVI.....	7
TABLE 1-4. INVENTORY DEFINITION FOR NON-COMMERCIAL CONIFER STAND DENSITY SUBJECTIVE DELETION. 8	
TABLE 1-5. INVENTORY DEFINITION FOR NON-COMMERCIAL DECIDUOUS STAND DENSITY SUBJECTIVE DELETION FOR THE FIRST ROTATION.....	8
TABLE 1-6. INVENTORY DEFINITION FOR NON-COMMERCIAL SPECIES SUBJECTIVE DELETION. ....	9
TABLE 1-7. AVI DEFINITION FOR NON-COMMERCIAL SITE INDEX.....	9
TABLE 1-8. INVENTORY DEFINITION FOR NON-COMMERCIAL TIMBER PRODUCTIVITY RATING. ....	10
TABLE 1-9. CRITERIA USED TO IDENTIFY ISOLATED STANDS IN THE AVI FMUS.....	11
TABLE 1-10. SUMMARY OF ASSUMPTIONS USED TO LINK CCSM AND AVI CODES TO ALBERTA'S WATERCOURSE CLASSIFICATION SYSTEM.....	13
TABLE 1-11. OVERVIEW OF DATA LAYERS UTILIZED IN LANDBASE DETERMINATION PROCESS.....	30
TABLE 1-12. SUMMARY OF RULES USED TO ASSIGN BROAD COVER GROUPS TO AVI.....	31
TABLE 1-13. RULES USED TO DEFINE YIELD CLASSES.....	33
TABLE 1-14. SUMMARY OF EXCLUSION HIERARCHY USED IN TERRESTRIAL LANDBASE NETDOWN ONLY.....	34
TABLE 1-15. RULES USED TO DESIGNATE LANDBASE.....	35
TABLE 1-16. AGE CLASS ASSIGNMENTS BY ORIGIN AND MODELING YEAR. ....	36
TABLE 1-17. NETDOWN SUMMARY FOR ALBERTA-PACIFIC FMA AREA. ....	38
TABLE 1-18. NETDOWN SUMMARY FOR 'NON-J' AREA OUTSIDE FMA AREA.....	39

## List of Appendices

APPENDIX I: PHASE 3 LANDBASE DETERMINATION PROCESS
APPENDIX II: TIMBER ZONE LANDBASE NETDOWN MAPS AND TABLES
APPENDIX III: PRIVATE LAND REDUCTIONS
APPENDIX IV: PROTECTED NOTATION LOCATIONS ACROSS FMA AREA
APPENDIX V: ISOLATED STAND ANALYSIS
APPENDIX VI: OIL AND GAS DOCUMENTATION
APPENDIX VII: MILLAR WESTERN RSI DOCUMENTATION
APPENDIX VIII: RESULTS OF SLIVER REMOVAL PROCESS
APPENDIX IX: AVI NETDOWN DATABASE DATA DICTIONARY
APPENDIX X: PHASE 3 NETDOWN DATABASE DATA DICTIONARY



## 1 Landbase Determination

The landbase determination process was used to define the net landbase currently available for timber harvesting, based upon the current set of operating ground rules and the most up-to-date landbase exclusions. This process can be expected to change in future analyses as newer data and improved methods become available. Alberta-Pacific Forest Industries Inc. (Alberta-Pacific) adopted the Alberta Interim Forest Management Planning Manual<sup>1</sup> as a guide for determining the net harvestable landbase available for timber harvesting.

Three broad classes of exclusion types were identified through the landbase determination process:

Forest that prohibits timber harvesting (Section 1.2);  
Inoperable or isolated stands (Section 1.3); and  
Operating Ground Rules<sup>2</sup> (Section 1.4).

These exclusion types were used to provide the framework for the landbase determination process, with subsequent steps integrating recent stand-level disturbances and more site specific modeling information. The resulting database was used to initiate the forest modeling process.

Alberta-Pacific is committed to estimating both deciduous and coniferous AACs. In circumstances where portions of an FMU extend beyond the FMA boundary, the area outside the FMA must be included in the conifer AAC estimate. This area, referred to as 'Non-J' area, must go through a landbase determination process. Differences between inventories existing inside and outside the FMA make it impossible for one process to address both landbases. To address this, Alberta-Pacific chose to modify the FMA landbase determination process to support inventories within the 'Non-J' portions of each FMU. A Phase 3 Landbase Determination process was developed and used for 'Non-J' area where AVI was not available (see Appendix 1).

The remainder of this document presents specific details on methods used to address exclusion types for the FMA (J) area. The final netdown FMA area summary is presented in Section 1.8.8 (Table 1-17) of this document. Unit level summaries (FMU) along with associated netdown maps are presented in Appendix II.

---

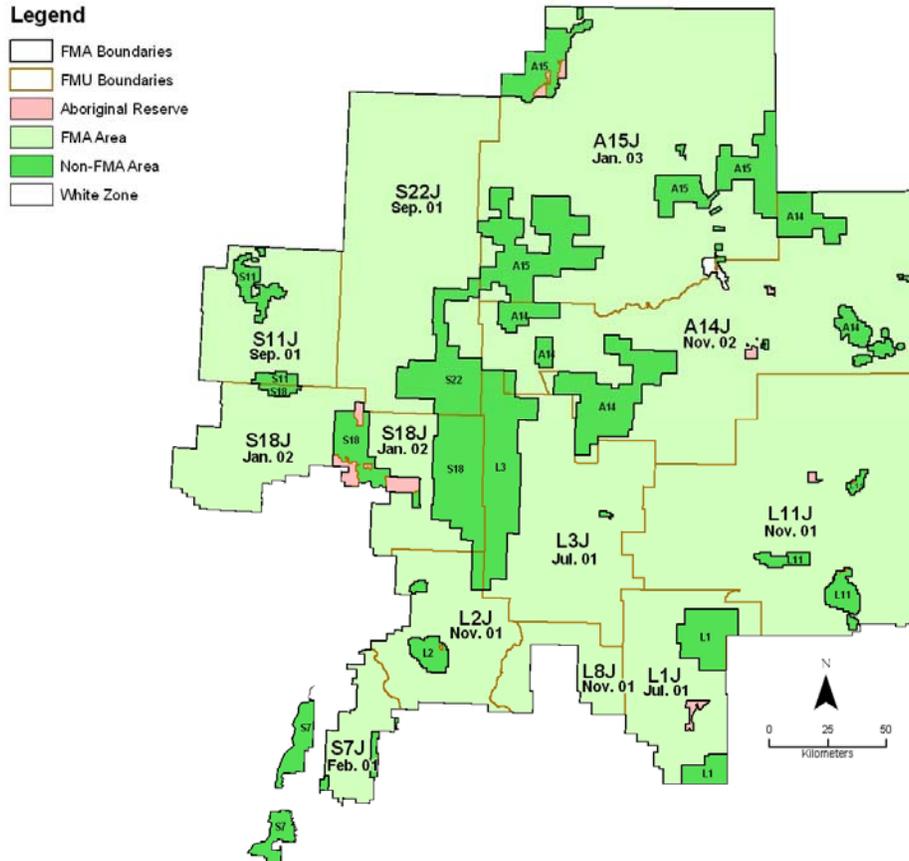
1 Alberta Environmental Protection - Lands and Forest Services. 1998. Interim Forest Management Planning Manual Guidelines to Plan Development; Supplemental Guidelines – Timber Supply Analysis Documentation Requirements. Edmonton, Alberta, Canada. pp6.

2 Alberta-Pacific Forest Industries. 2000. Alberta-Pacific's Operating Ground Rules. Boyle, Alberta, Canada. pp97.

## 1.1 Inventory Background

The current FMA area AVI used for the analysis was based on 1:15,000 black and white photography taken between 1992 and 2001. The landbase determination will only be performed on FMUs where approved AVI exists. Since 1992, the inventory has been updated to reflect recent harvest depletions (Table 1-1). Additional landbase depletions (harvesting, fire, oil & gas activity) not accounted for in the base inventory were integrated into the modeling process through thematic overlays, as described in Section 1.5: Integration of Recent Landscape Disturbances.

'Non-J' inventory has originated from a variety of sources, as shown in Table 1-1 & Table 1-2. There is a significant amount of 'Non-J' area where AVI is incomplete, leaving Phase 3 data as the alternative inventory.



**Figure 1-1. Overview of J and 'Non-J' areas along with status of original AVI approval process.**

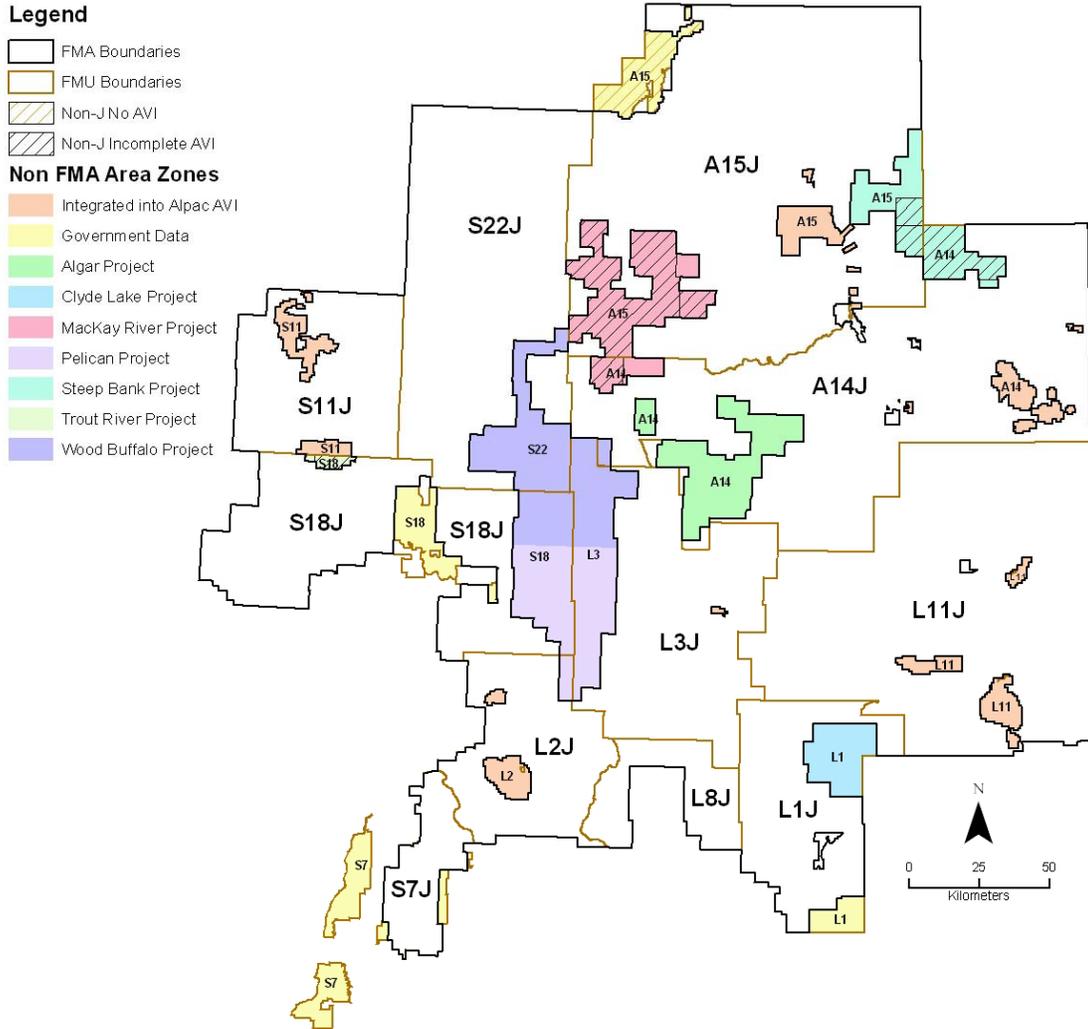


Figure 1-2. Overview of 'Non-J' inventory sources.

**Table 1-1. Summary of AVI status for FMUs within the FMA.**

Forest Management Unit (FMU)	A.V.I Audit / Approval				AVI Approval	
	Original 1:15,000	Ortho Updates	CIR Updates	Update Photography		
1	S7J	Aug-93	1993	1999	May-00	Feb-01
2a	S18J(S4J)	Aug-92	1992	2000	May-00	Jan-02
2b	S18J(S8J)	Aug-92	1992	2001	May-00	Jan-02
3	S11J	Sep-95	1995	1997	May-97	Sept-01
4	S12J (S22)	Aug-95	1995	1997	---	Sept-01
5	S13J (S22)	Sep-96	1997	1997	---	Sept-01
6	L1J	Sep-93	1992	1996	May-00	July-01
7	L2J	Jul-93	1993	1999	May-00	Nov-01
8	L3J	Aug-94	1994	1995	May-01	July-01
9	L11J(L4J)	Aug-94	1995	1998	May-00	Aug-01
10	L11J(L5J)	Jun-96	1994	1998	May-00	Nov-01
11	L11J(L6J)	Sep-95	1995	1998	May-00	Sept-01
12	L8J	Aug-97	1994	1998	May-00	Nov-01
13a	A14J (A1)	Jul-99	1999	1998	Jun-99	Nov-02
13b	A14J(A2J)	Jul-99	1999	1998	May-00	Nov-02
13c	A14J(A3J)	Jul-99	1999	1998	May-00	Nov-02
13d	A14J (Clearwater) <sup>3</sup>	Sep-97	1991	1998	May-98	Sept-20
14	A4J (A15)	Sep-98	1999	1998	---	Sept-20
15	A5J (A15)	Aug-98	1999	1998	May-01	Jan-03
16	A7J (A15)	Sep-98	1994	1998	May-98	Sept-02
17	A8J (A15)	Sep-98	1994	1998	---	Sept-02

Note: Update photography is ongoing throughout the FMA area.  
See SAVI section in the TSA document for information on the continual update of the FMA Area AVI.

<sup>3</sup> Original Clearwater Inventory includes 22 townships in A2 and A3.

**Table 1-2. Summary of AVI status for 'Non-J' Area.**

	Forest Management Unit (FMU)	A.V.I Audit / Approval			Completion Year
		Orig. Photos	AVI Status	Comments	
1a	S7 (Gov't. Data: Fringe)	1988	Complete	Completed by Gov't.	1990
1b	S7 (Gov't. Data: Vega)	1988,94	Complete	Completed by Gov't.	1989,94
2a	S18 (Gov't. Data)	N/A	N/A	No AVI process in place	N/A
2b	S18 (Wood Buffalo)	1997	Complete	Timberline Gov't. Contract	---
2c	S18 (Pelican Lake)	1997	Complete	Timberline Gov't. Contract	---
2d	S18 (Trout Lake)	1992	Complete	Timberline Gov't. Contract	2006
3	S11 (Alpac AVI)	1992	Complete	Completed with Alpac AVI	---
4	S12 (Wood Buffalo)	1997	Complete	Timberline Gov't. Contract	---
5	S13 (Wood Buffalo)	1997	Complete	Timberline Gov't. Contract	---
6a	L1 (Clyde Lake)	1997	Complete	Timberline Gov't. Contract	Mar-02
6b	L1 (Gov't. Data)	---	Complete	Completed by Gov't.	---
7a	L2 (Alpac AVI)	1993	Complete	Completed with Alpac AVI	---
7b	L2 (Pelican Lake)	1993	Complete	Timberline Gov't. Contract	---
8a	L3 (Alpac AVI)	1997	Complete	Completed with Alpac AVI	---
8b	L3 (Pelican Lake)	1997	Complete	Timberline Gov't. Contract	---
8c	L3 (Wood Buffalo)	1997	Complete	Timberline Gov't. Contract	---
9	L4 (Alpac AVI)	1996	Complete	Completed with Alpac AVI	N/A
10	L5 (Alpac AVI)	1996	Complete	Completed with Alpac AVI	---
11	L6 (Alpac AVI)	1995	Complete	Completed with Alpac AVI	---
12	L8	N/A	N/A	No Non-FMA Area	N/A
13a	A14 (Alpac AVI)	1999	Complete	Completed with Alpac AVI	---
13b	A14 (Wood Buffalo)	1999	Complete	Completed with Alpac AVI	2006
13c	A14 (Steep Bank)	1999	Complete	Completed with Alpac AVI	2006
13d	A14 (Algar)	1999	Complete	Completed with Alpac AVI	2006
13e	A14 (MacKay River)	1999	Complete	Completed with Alpac AVI	2006
14	A4 (MacKay River)	1998	Incomplete	No Process in-place with SRD	NA
15a	A5 (Alpac AVI)	1998	Complete	Completed with Alpac AVI	2006
15b	A5 (Steep Bank)	1998	Complete	Completed with Alpac AVI	2006
16a	A7 (Alpac AVI)	1999	Complete	Completed with Alpac AVI	2006
16b	A7 (Steep Bank)	1999	Complete	Completed with Alpac AVI	2006
17	A8 (Gov't. Data)	N/A	Complete	Completed with Alpac AVI	2006

### 1.1.1 Softcopy Alberta Vegetation Inventory (SAVI)

In addition to the AVI that is utilized in the netdown, the FMA area has a dynamic inventory update process; this process is referred to as SAVI. Since 2001, approximately 65 townships / year are updated with new SAVI inventory information. These updates are as follows:

- Fire boundaries
- Base data features – roads, streams, lakes, transmission lines
- Forest Company cutblocks
- Energy sector land-use (seismic, pipelines, well-sites, MOSA)

The result of the update is an updated AVI for various FMUs. This updated SAVI database is utilized in the netdown for seven FMUs – S18, S7, L2, L1, L8 and L3 and L11. The House River burn of 2002 has not been updated through SAVI. The SAVI is presented in the timber supply document.

## 1.2 Forest That Prohibits Timber Harvesting

This exclusion class was used to ensure that forested areas, designated as incompatible with timber planning were removed from the timber harvesting landbase. The following exclusion types were identified on the Alberta-Pacific FMA area:

Private land;  
Protected Notations;  
Provincial Parks & Natural Areas;  
Aboriginal Reserves, Ecological Reserves Liege River Area (2000 DFMP Proposal); and  
Athabasca and Clearwater Breaks (Deciduous Only)

The current AVI does not carry any characteristics pertaining to land status. It was therefore necessary to integrate this additional information through the use of a geographical information system (GIS).

### 1.2.1 Private land

**Source:** LSAS (Land Status Automated System)

**Acquisition Date:** July 2000

**Effective Date:** July 2000

The current private land database held by Alberta Public Lands has very limited spatial capability with no digital boundaries. It is however capable of providing a gross approximation of the general location of private lands and their respective areas through the Land Status Automated System (LSAS). To enhance the utility of this database, a digital coverage was generated to the quarter section level, identifying the percentage of private land occurring within each quarter section (refer to Appendix III). To produce this digital coverage it was necessary to have a complete list of all quarter sections and

their respective percentage of private land. Quarter sections were then extracted from the provincial index grid and assigned the appropriate percentage of private land<sup>4</sup>.

Private land reductions were then integrated into the netdown procedure by overlaying the resulting digital map with the AVI coverage. The general percentage reduction was then applied to the total area ensuring no bias towards any one strata type. The distribution of private land across the FMA area is presented in Figure 1-3.

### 1.2.2 Protected Notations

**Source:** GLIMPS<sup>5</sup> (Sustainable Resource Development)

**Acquisition Date:** January 2000

**Effective Date:** Unknown

The protected notations (PNT) data set was extracted from the Land Status Automated System (LSAS) identifying PNTs at a quarter section resolution. Associated with each PNT record was the area of the current PNT and a list of overlapping quarter sections.

Appendix IV identifies the quarter section associated with each PNT and presents a map of the PNT locations across the FMA area. With no digital boundary, only coarse approximations of PNT locations could be attained. An exploratory analysis of the PNT database indicated that the majority of the PNTs do not prohibit timber harvesting but do have specific restrictions on harvesting operations. Because of the subjective nature of the PNT areas it was decided to leave all PNTs in the timber harvesting landbase and address any restrictions at the timber supply modelling level. Some PNT's were eliminated from the landbase. These PNT's were identified through discussions with Alberta SRD and in 2006 and PNTs classed as "Maybe(N)" became "N".

Permanent sample plots (PSPs) are one exception to this approach. Alberta-Pacific maintains a digital inventory of all PSP locations across the FMA area. All PSP locations were spatially identified and buffered 100m from all sides of the PSP boundary. The buffered PSPs were then integrated into the landbase determination process by overlaying the resultant digital map with the AVI. Area within the PSP buffers was excluded from the timber harvesting landbase.

### 1.2.3 Provincial Parks & Natural Areas

**Source:** Alberta Tourism, Parks, Recreation and Culture

**Acquisition Date:** November 2006

**Effective Date:** 2006 Parks

Provincial parks and natural areas were identified in the netdown procedure by overlaying the digital boundaries with the existing AVI. The park and natural area boundaries were acquired from Alberta Tourism, Parks, Recreation and Culture. They

---

<sup>4</sup> Only quarter sections containing more than 0.1% private land were used in the analysis.

<sup>5</sup> Geographic Land Information Management and Planning System.

include all approved provincial parks and natural areas existing within the Province of Alberta and are presented at 1:20,000 scale. Figure 1-3 illustrates the distribution of provincial parks and natural areas located across the FMA area.

#### **1.2.4 Aboriginal Reserves, Ecological Reserves**

**Source:** Alberta Environmental Protection; Resource Data Division

**Acquisition Date:** February 2000 – Updated March 2006

**Effective Date:** 1998 Base Data

Aboriginal reserves and ecological reserves within the FMA area were integrated into the landbase determination process by merging their digital boundaries with the AVI. These digital boundaries were received from Alberta Environment (Resource Data Division) under the current data sharing agreement. The digital boundaries for these areas were captured at a 1: 20,000 scale. The distribution of aboriginal reserves and ecological reserves existing across the FMA area is presented in Figure 1-3 below.

#### **1.2.5 Swan Buffer**

**Source:** Alberta Sustainable Resource Development

**Acquisition Date:** March 2007

**Effective Date:** March 2007

Specified lakes within the FMA were designated by Alberta SRD as “Swan” lakes. These lakes were buffered by 200 meters and then given an ecological reserve designation.

#### **1.2.6 Bigstone Cree Nation Traditional Land Entitlement Layer**

**Source:** Bigstone Cree Nation

**Acquisition Date:** June 2006

**Effective Date:** June 2006

Bigstone Cree Nation Traditional Land Entitlement Layer was integrated into the landbase to track and control harvest sequencing within the west side of the FMA. This layer is not an official administrative boundary, and has yet to be ratified by the federal government. It is used to be proactive in the interest of land entitlement proceedings. The volume contained in the boundary is not excluded from the net landbase, but it is used to prevent harvesting within the claim. A map of the TLE is presented in the TSA document.

### 1.2.7 Liege River Area (2000 DFMP Proposal)

**Source:** Alberta Environmental Protection; Resource Data Division

**Acquisition Date:** April 2000

**Effective Date:** 2000

The Liege area was nominated as a candidate site under the Special Places 2000 program. This area was recommended by the AI-Pac FMA Area Forest Management Task Force in the 2000 DFMP as an ecological benchmark to be used for monitoring of ecological processes. The area did not receive a protected status and will not be re-evaluated in 2011. The area is to be treated as a separate compartment that will not be available for harvest scheduling until at least 2011.

The Liege area was incorporated into the netdown procedure by overlaying the current Liege boundary with the AVI digital data set. The Liege area was digitized at 1:1,000,000 scale by Alberta Environment (Resource Data Division) and was provided through the current data sharing agreement. The location of the Liege area is presented in Figure 1-3 below.

### 1.2.8 Athabasca and Clearwater Breaks (Deciduous Only)

**Source:** Alberta-Pacific

**Acquisition Date:** April 2000

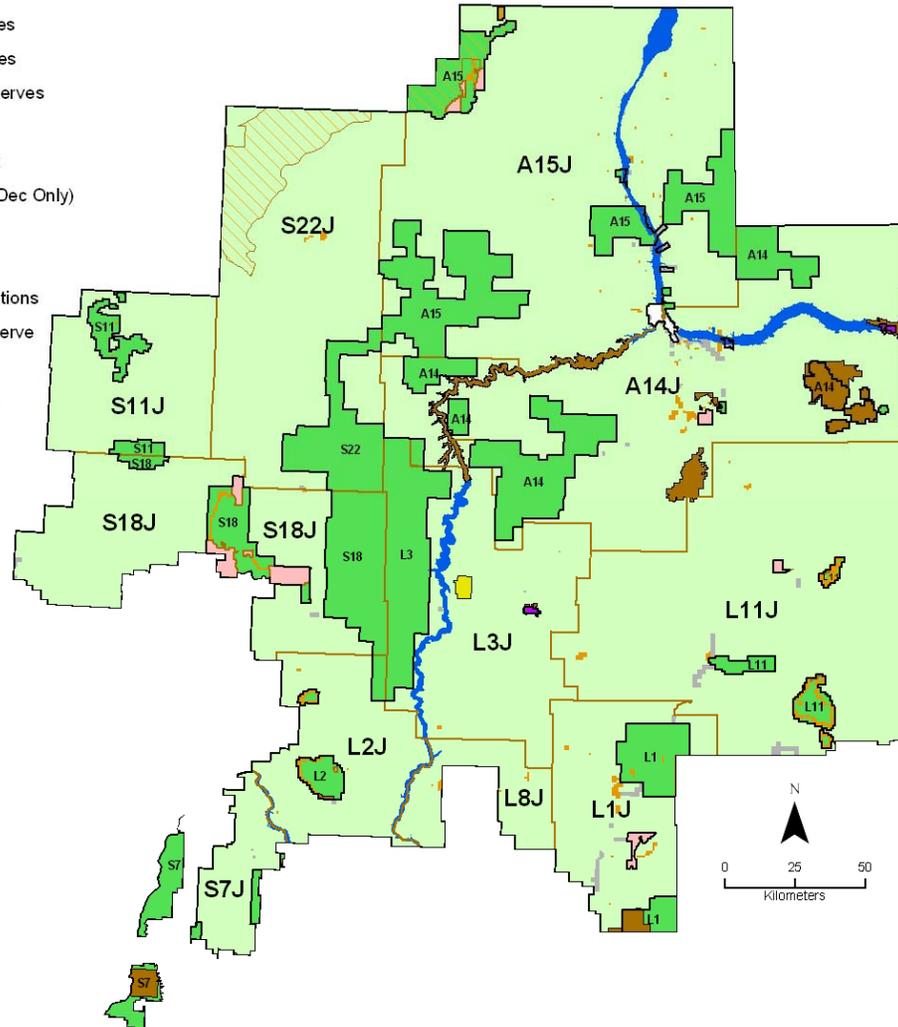
**Effective Date:** 1993; updated March 2000

Through the use of digital terrain models in combination with existing contour lines, Alberta-Pacific generated a digital representation of the river valley “breaks”. These areas are adjacent to rivers, and are marked by a significant change in slope which defines the river valleys. The resulting dataset is used in conjunction with the existing watercourse buffers to ensure that the Athabasca and Clearwater River valleys are withheld from the deciduous harvesting landbase, in recognition of the tourism/ recreational potential of these areas. Deciduous harvesting is ineligible for the entire planning horizon. A detailed review of the options available will be undertaken and presented to the public by the local taskforce at or before 2009. Coniferous stands within these areas currently contribute to the coniferous harvesting landbase.

In the TSA, a sensitivity analysis was completed to ascertain the affect on the conifer AAC of the removal of conifer landbase for FMUs A14, L3, L2, and S7. This analysis is presented in the TSA document.

**Legend**

-  FMA Boundaries
-  FMU Boundaries
-  Ecological Reserves
-  Natural Areas
-  Provincial Park
-  River Breaks (Dec Only)
-  Liege Area
-  Private Land
-  Protected Notations
-  Aboriginal Reserve
-  FMA Area
-  Non-FMA Area
-  White Zone



**Figure 1-3. Distribution of exclusions (uses that prohibit timber harvesting) on FMA area.**

### 1.3 Inoperable or Isolated Stands

Inoperable or isolated stands considered unsuitable for timber harvesting were identified and removed from the timber harvesting landbase. Forest types excluded from the timber harvesting landbase are summarized in the following four categories:

Non-Forest Exclusions  
Subjective Deletions  
Sensitive Slopes  
Isolated Stands

#### 1.3.1 Non-Forest Exclusions

Non-forest exclusions were used to remove area from the gross landbase that is currently inventoried as non-forested. These exclusion types were defined using the following six classes:

Natural Non-Vegetated  
Anthropogenic Non-Vegetated  
Anthropogenic Vegetated  
Non-Forest Vegetated  
Non-Forested Cutblocks  
Non-Forested Natural Disturbances

Definitions of these non-forested classes according to their AVI attributes are presented in Table 1-3.

**Table 1-3. Non-forest land classes defined using AVI.**

<b>Non-Forest Land Class</b>	<b>Alberta Vegetation Inventory</b>	
	<b>Attribute</b>	<b>Value</b>
<b>Aquatic Features Naturally Non-Vegetated</b>	NAT_NON	NWL, NWR, NWF
	NAT_NON	NWI, NWF, NMB, NMC, NMR, NMS
<b>Anthropogenic Non-Vegetated</b>	ANTH_NON	ASC, ASR, AIH, AIE, AIG, AIF, AIM, AII
<b>Anthropogenic Vegetated</b>	ANTH_VEG	CA, CP, CPR, CIP, CIW
<b>Non-Forest Vegetated</b>	NFL	BR, HF, HG, SC, SO
<b>Non-Forested Cutblocks*</b>	MOD1 & MOD2	CC: Pre-1991 blocks without a free to grow forest (i.e. AVI indicates no forest is currently established)
<b>Non-Forested Natural Disturbances**</b>	MOD1 & MOD2	BU, WF, CL, DI, IK, UK, WE, DT, BT, SN: without a free to grow forest (i.e. AVI indicates no forest is currently established)

\* - Harvested areas (mod1 = CC) may later be reassigned to the timber harvesting landbase.  
\*\* - Burned areas that have been harvested and reforested will be reassigned to the timber harvesting landbase.

### 1.3.2 Subjective Deletions

Subjective deletions were identified across the FMA area to remove forested stands that are currently considered unsuitable for harvesting operations. This exclusion class was defined using the following categories:

- Non-commercial Coniferous Stand Densities
- Non-commercial Deciduous Stand Densities
- Non-commercial Species
- Non-commercial Site Index (Height – Age Relationship)
- Non-commercial Timber Productivity Rating (TPR)

#### 1.3.2.1 Non-commercial Coniferous Stand Densities

The non-commercial coniferous stand densities subjective deletions excluded older conifer stands with insufficient stocking. The AVI definition used to define the exclusion is presented in Table 1-4. Jack pine Fair was subjectively deleted (See Pj G&Y Appendix).

**Table 1-4. Inventory definition for non-commercial conifer stand density subjective deletion.**

Leading Species	Stand Density Class		Stand Origin (year)	Stand Height (meters)	MOD1
	Overstory	Understory			
P, Pl, Pj, Sb, Sw, Fb	A	A or NONE	< 1950	<18	◇ “CC”

#### 1.3.2.2 Non-commercial Deciduous Stand Densities

All ‘A’ density deciduous stands (6 – 30% Crown Closure) currently available for timber harvesting were excluded from the timber harvesting landbase, in their first rotation. In consideration of successional trends observed within the boreal forest it is assumed that ‘A’ density stands after natural break-up regenerate back to a stand containing a greater number of stems per ha (‘B’ density). In an attempt to mimic this natural process the ‘A’ density stands were initially excluded from the timber harvesting landbase and were returned to the productive landbase following natural break-up. The AVI definition used to define the exclusion is presented in Table 1-5.

**Table 1-5. Inventory definition for non-commercial deciduous stand density subjective deletion for the first rotation.**

Inventory	Leading Species	Stand Density Class	
		Overstory	Understory
AVI	Aw, Bw, Pb	A	A or NONE

**1.3.2.3 Non-commercial Species**

The non-commercial species subjective deletion removed all stands dominated by tree species that currently have no timber value. More specifically it removed all stands with larch assigned as the leading or secondary species. The AVI definition for this exclusion is presented in Table 1-6.

**Table 1-6. Inventory definition for non-commercial species subjective deletion.**

<b>Inventory</b>	<b>Sp 1</b>	<b>or</b>	<b>Sp 2</b>	<b>or</b>	<b>Sp 3</b>	<b>or</b>	<b>Sp 4</b>	<b>or</b>	<b>Sp 5</b>
AVI	Lt	or	Lt	or	Lt	or	Lt	or	Lt

**1.3.2.4 Non-commercial Site Index (Height – Age Relationship)**

The non-commercial site index subjective deletion excluded slow growing stands that may never reach merchantable height. The approach is based upon a height-age requirement that states a stand must attain a height of 15 meters by 180 years of age. The AVI rules are presented below (Table 1-7).

**Table 1-7. AVI Definition for non-commercial site index.**

<b>Stand Height (m)</b>	<b>Stand Age Threshold (years) by Leading Species</b>			
	<b>Sb or Lt</b>	<b>Pj or Pl</b>	<b>Sw or Fd or Fb</b>	<b>A or Aw or Bw or Pb</b>
1	>18	>13	>27	>18
2	>18	>13	>27	>18
3	>18	>13	>27	>18
4	>28	>22	>38	>26
5	>37	>28	>49	>34
6	>47	>37	>60	>46
7	>57	>47	>72	>53
8	>68	>57	>84	>67
9	>80	>68	>95	>75
10	>93	>80	>107	>86
11	>117	>95	>120	>101
12	>123	>111	>134	>117
13	>140	>130	>148	>136
14	>165	>160	>165	>160
15	>180	>180	>180	>180

**1.3.2.5 Non-commercial Timber Productivity Rating (TPR)**

This subjective deletion removed all stands with an unproductive (U) Timber Productivity Rating (TPR). In addition, Pine stands with a TPR ranking of Fair were also excluded. The AVI definition for this exclusion is presented in Table 1-8.

**Table 1-8. Inventory definition for non-commercial timber productivity rating.**

<b>Inventory</b>	<b>Leading Species</b>	<b>TPR</b>	<b>MOD1</b>
AVI	Any	U	<> "CC"
AVI	PJ	F	

**1.3.3 Sensitive Slopes**

**Source:** Alberta Environmental Protection; Resource Data Division

**Acquisition Date:** May 2001

**Effective Date:** 1998 Base Data

This exclusion class was used to identify operationally sensitive slopes occurring within the FMA area. Sensitive slopes were defined according to the Operating Ground Rules<sup>6</sup>, which state that a 45% slope will normally serve as the upper limit for operability for ground based logging equipment. To ensure that these sensitive slopes were excluded from the timber harvesting landbase, only stands inventoried as having a slope percentage less than 45% remained as part of the timber harvesting landbase.

Due to the fact that the current AVI does not report slope as an inventory characteristic, it was necessary to develop slope coverage using GIS modelling procedures and the respective digital elevation points. The digital elevation points used within this analysis held a spatial resolution of 100m and were obtained from Alberta Environment (Resource Data Division) under the current data sharing agreement. Once identified, steep slopes were integrated into the AVI digital data set to identify areas with slopes greater than 45%.

<sup>6</sup> Alberta-Pacific Forest Industries. 2000. Alberta-Pacific's Operating Ground Rules. Boyle, Alberta, Canada. p30.

### 1.3.4 Isolated Stands

Source: Access Layers - Spatial Data Warehouse Base Data from Alberta-Pacific

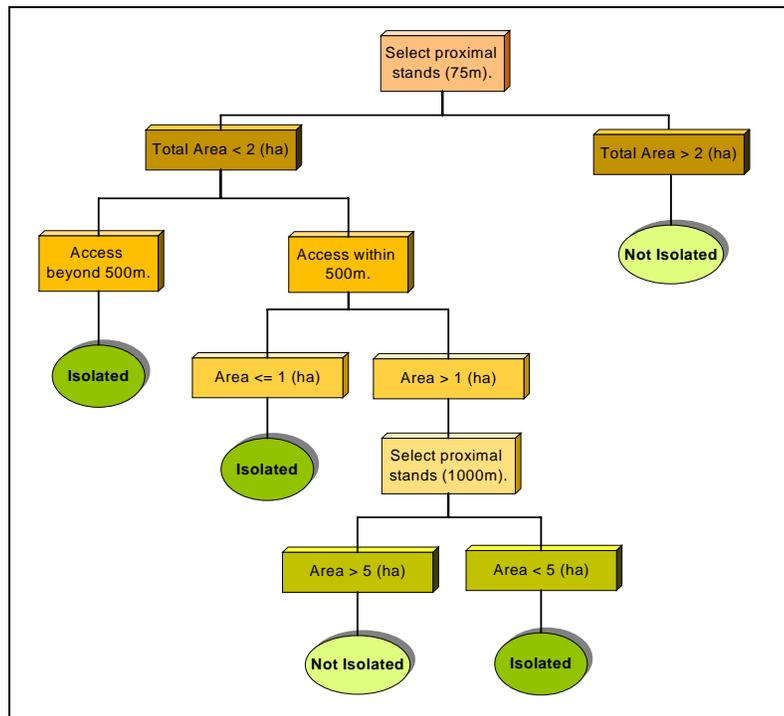
Acquisition Date: February 2000

Effective Date: 1998 Base Data

Isolated stands that are currently infeasible for harvesting due to spatial operating constraints were excluded from the available timber harvesting landbase. An isolated stand analysis was completed (in Arc/Info™) on the current digital forest cover, excluding all stands that are assumed to be isolated as defined in Table 1-9 and Figure 1-4. An example of this analysis for one township is shown in Appendix V of this report.

**Table 1-9. Criteria used to identify isolated stands in the AVI FMUs.**

Criterion	Description
1	All stands < 1 ha and not adjacent to other harvestable types
2	All stands $\geq$ 1 ha and < 2 ha and not within 500m of a road or seismic line
3	All stands $\geq$ 1 ha and < 2 ha that cannot be grouped to other harvestable stands within 1000m to make a minimum unit of 5 ha.



**Figure 1-4. Isolated stands analysis implemented across the FMA area.**

## 1.4 Operating Ground Rules

While current ground rules apply mostly to short-term planning, watercourse buffers were integrated into the Timber Supply Analysis (TSA) to become a part of the long term planning process. This was done to strengthen the link between short and long-term planning. New OGRs for the N.E. Alberta are currently being prepared under the direction of Alberta SRD; expected AB SRD ratification in 2008.

### 1.4.1 Watercourse Buffers

**Source:** Spatial Data Warehouse Base Stream Data

**Acquisition Date:** May 2001

**Effective Date:** 1998 Base Data

FMA operating ground rules currently exclude harvesting activity in areas adjacent to and surrounding water features for watershed protection purposes.

#### 1.4.1.1 AVI Water Course Buffers

The watercourse buffer exclusion incorporates all rivers and lakes that currently exist in the AVI. It also incorporates stream data acquired from Alberta Base National Topographic Series (NTS) maps. Lake, stream and river buffer coverage were generated in accordance with buffer definitions as described by the current Operating Ground Rules.

Ground Rules are based on Alberta's watercourse classification system<sup>7</sup> which is different from the base stream data used by the Canadian Centre of Surveying and Mapping (CCSM) water classification systems. The relationship between CCSM, the AVI water classification and Alberta's watercourse classification is defined using the rules in Table 1-10.

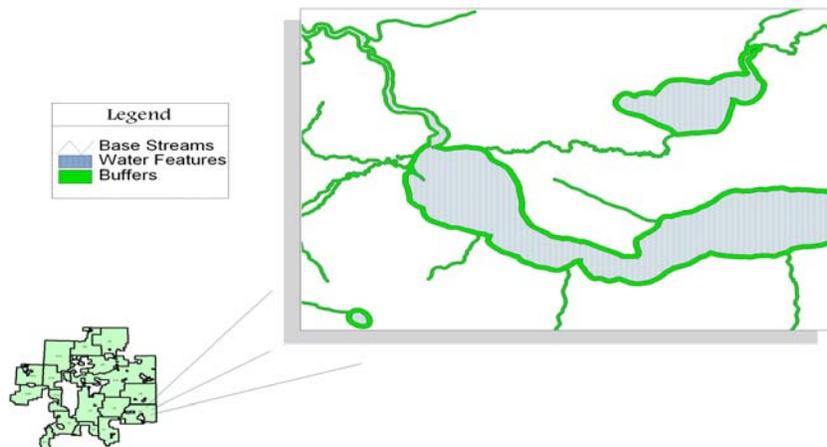
---

<sup>7</sup> Alberta-Pacific Forest Industries. 2000. Alberta-Pacific's Operating Ground Rules. Boyle, Alberta, Canada. pp29.

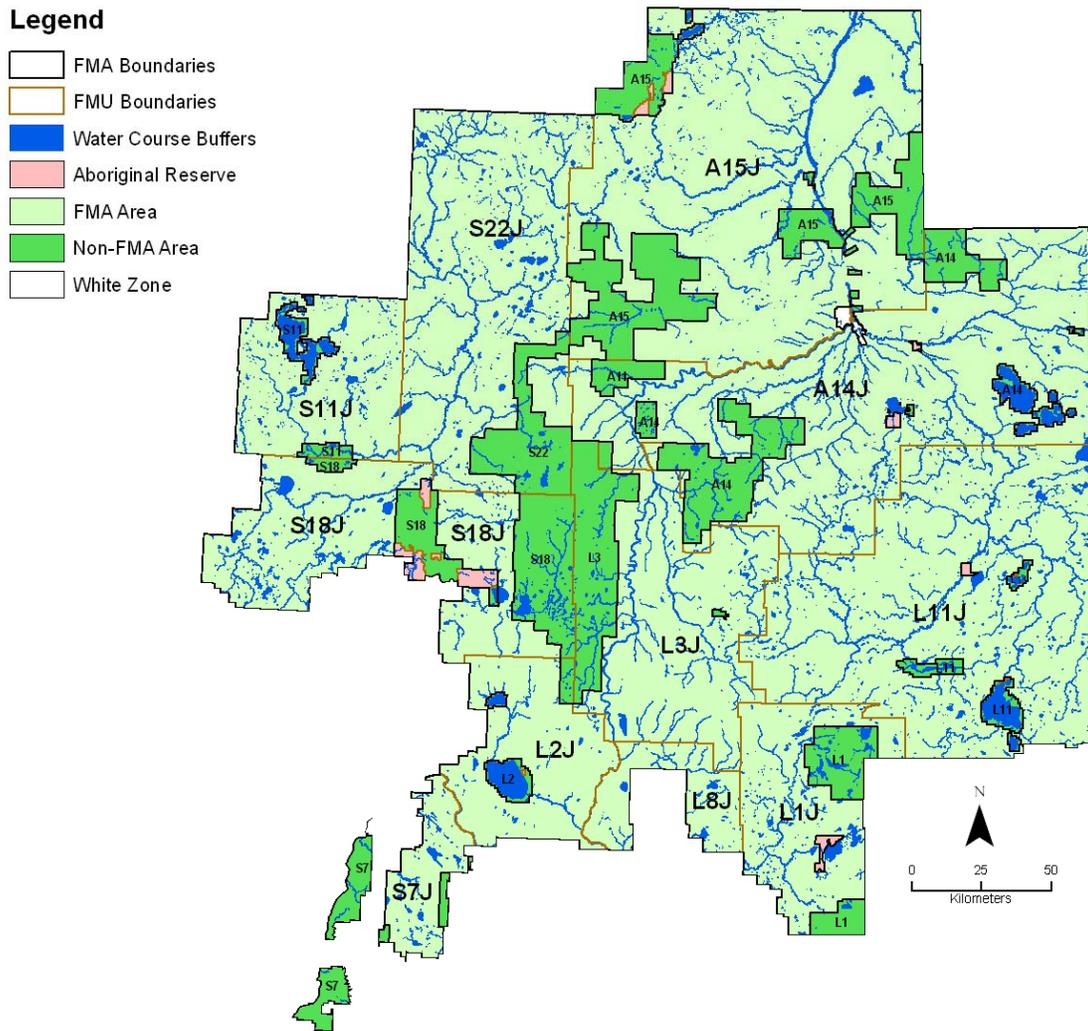
**Table 1-10. Summary of assumptions used to link CCSM and AVI codes to Alberta’s watercourse classification system.**

Alberta’s Watercourse Classification			CCSM Code / AVI Code		Final
Classification	Map Designation	Buffer	Classification	Description	Buffer
Large Permanent	solid heavy line or double line	60m	AVI: NWR	River	60m
Small Permanent	usually solid but some are broken lines	30m	CCSM: GA61900-0	Perennial constant line	30m
Intermittent	usually a broken light line	---	CCSM: GA61750-0	Intermittent constant line	---
Ephemeral	Not normally mapped	---	CCSM: GA-61700-0	Indefinite constant line	---
Lakes	solid line to outline a water body	100m (>4ha)	AVI: NWL All lakes greater than 4ha		100m (>4ha)
Water Source Areas	N/A	---	---	---	---

Large permanent streams were buffered 60m on each side of the stream, small permanent streams were buffered 30m on each side of the stream, and lakes greater than 4ha were buffered 100m from their high water mark. The resulting buffer coverages were merged together to produce a complete coverage encompassing the entire FMA area. The buffer coverage was then merged with the AVI coverage to identify stands or portions of stands that are within the specified buffer distance. This overlay allowed explicit quantification of forested areas contained within protective buffers. Figure 1-5 illustrates the results of the buffering process. Figure 1-6 illustrates the buffers applied in the FMA area.



**Figure 1-5. A representation of protective watercourse buffers applied within FMA area.**



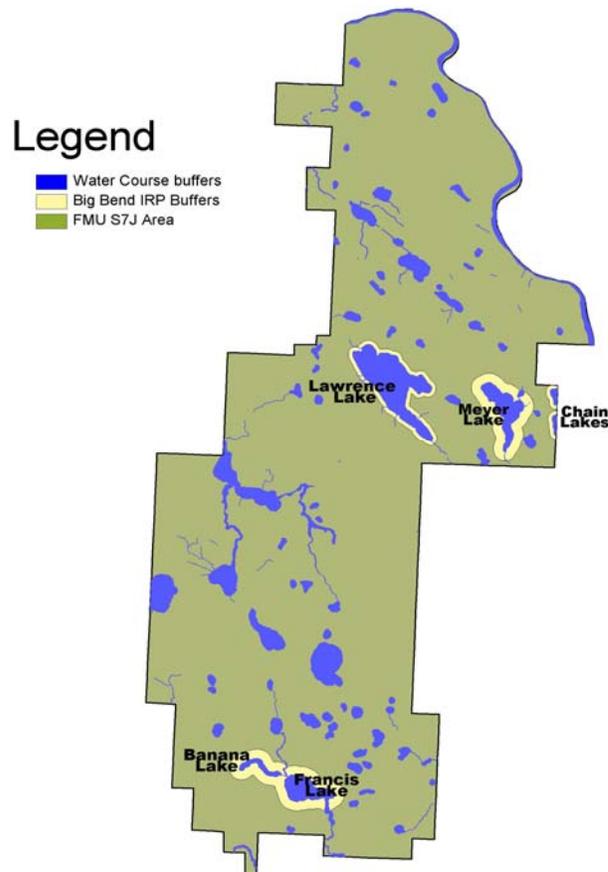
**Figure 1-6. Protective watercourse buffers across FMA area.**

### 1.4.2 Integrated Resource Plan (IRP) Buffers

Additional buffering was required when buffering watercourse features within the Big Bend IRP areas, as follows:

- Banana Lake, Francis Lake and Meyer Lake required a buffer of 800 meters.
- Lawrence Lake and Chain Lakes required a buffer of 400 meters.

The areas inside the IRP buffers, but outside the watercourse buffers (Figure 1-7) are classified as “restricted harvesting”. This designation was defined in the IRP and states that there shall be no large-scale timber harvesting within these buffered areas; the volume recovered for any given stand only 50 percent of the inventoried volume. The current timber supply treats this as a no harvest area for the entire planning horizon.



**Figure 1-7. Distribution of IRP buffers identified in Big Bend IRP within FMU S7J.**

## 1.5 Integration of Recent Landscape Disturbances

Integration of recent stand-level disturbance information into the netdown process served two purposes:

It identified recent disturbances that are not currently part of the inventory; and  
It provided additional information on disturbances that were inventoried.

The following sections describe the methodology used to address and integrate stand-level disturbances into the landbase determination process. Fire, oil and gas, and forest company harvesting activity are the three major disturbances occurring within the Alberta-Pacific FMA area.

### 1.5.1 Recent Fire Activity (Burns)

Recent fires not included in the current AVI were addressed in the following manner. All burns having no regenerating forest cover were excluded from the timber harvesting. One exception is that in areas where salvage cuts were undertaken, the current forest cover type may indicate no regenerating forest cover; due to reforestation commitments these areas remain a part of the productive landbase. The rationale for permanently excluding all other burned areas is based on the assumption that the amount of existing burn reflects the historic amount that can be expected to perpetuate through time.

The AVI data for some FMUs have not been updated since the inventory flight year. Therefore it is possible for the inventory to be as old as 10 years in some areas. Fire boundaries dating back to 1993 were required for a complete update. Alberta Sustainable Resource Development provided all fire information which occurred between 1993 to 2006. Fires prior to 1993 were captured from the existing AVI inventory. The next step in this approach was to merge the fire maps with the existing AVI inventory (Figure 1-8). The 2007 McKay River fire in A15 is not captured in the netdown; after the datestamp.

### 1.5.2 FireSmart

**Source:** Alberta Sustainable Resource Development

**Acquisition Date:** March 2006

**Effective Date:** March 2006

Two completed FireSmart areas were incorporated in the FMA area; Calling Lake and Conklin. The intent of this was to control the timing of harvest sequencing within this area to effectively “FireSmart” the community. FireSmart is part of the 2007 SHS.

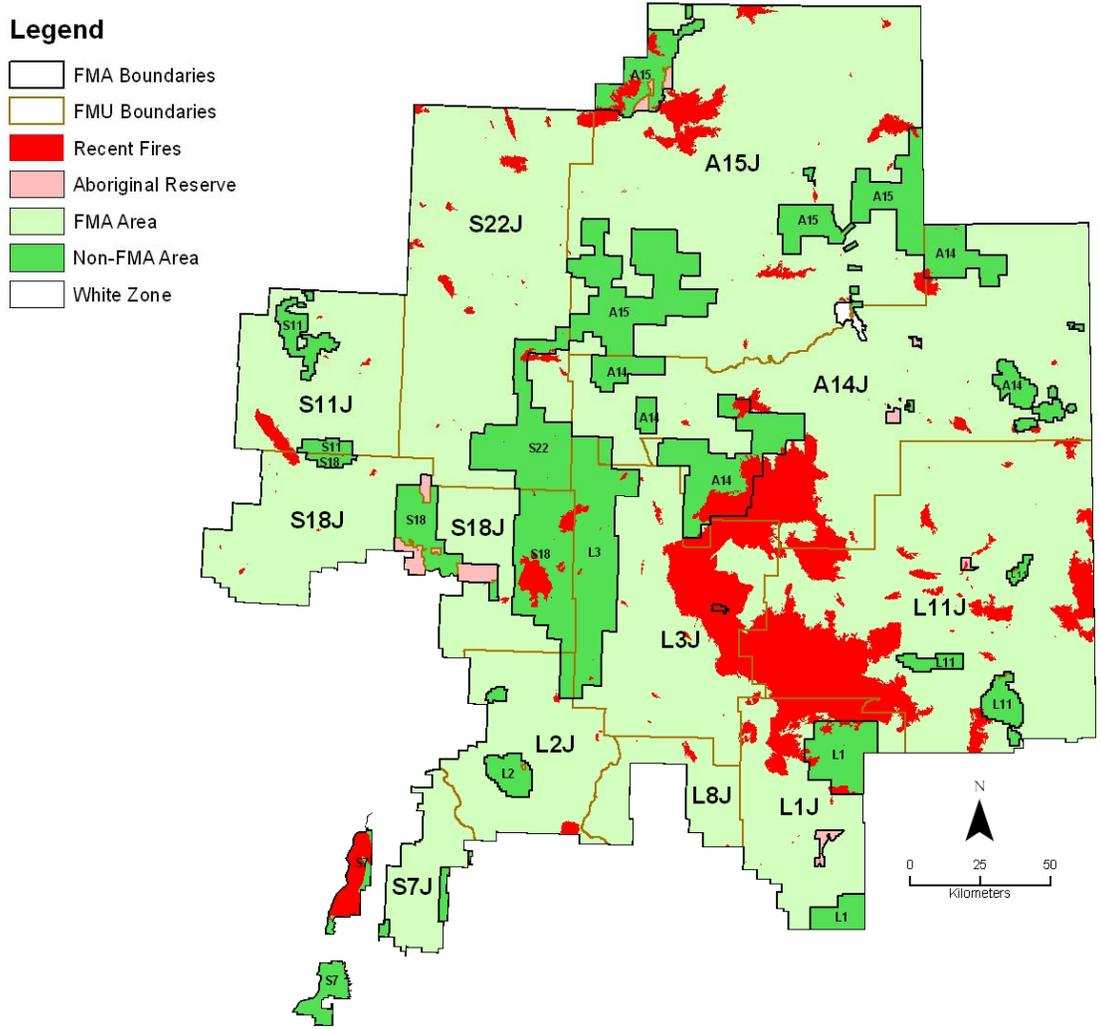


Figure 1-8. Distribution of recent fires across FMA area.

### 1.5.3 Oil & Gas Activity (Seismic / Well Site / Pipe Lines)

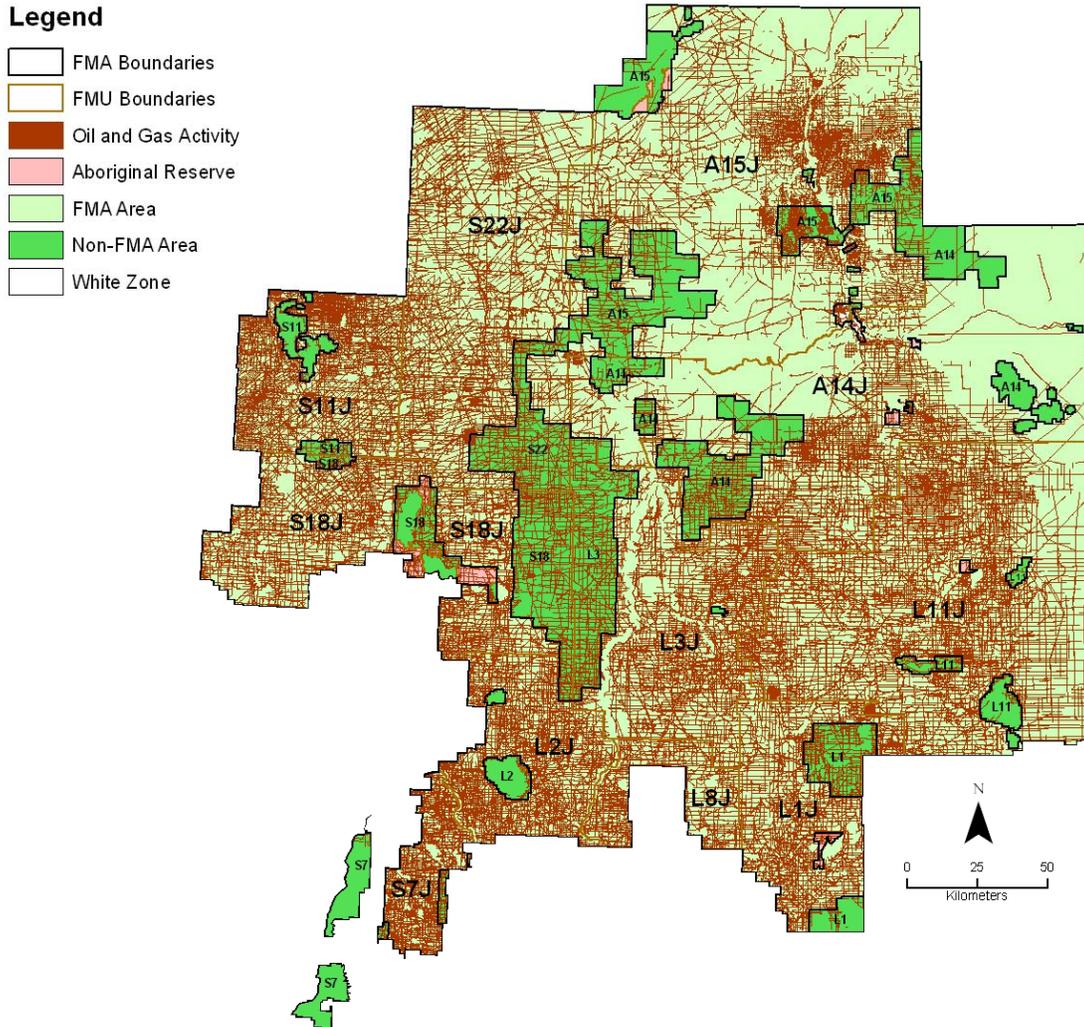
For the 2006/07 landbase netdown it was identified that the original 2004 Oil & Gas was outdated. Appendix VI represents the logic flow of the new process that is designed to capture the current industrial footprint. Such features included; seismic lines, well sites, pipelines and transportation corridors.

Linear features that were represented as a single line feature in the datasets were given a polygonal representation, through a buffer, which allowed for spatial overlay in the landbase netdown. If these corridors already existed in the forest inventory polygonal dataset, then they were disregarded. The buffer widths were based on any information contained in the attribute files or as identified in appendix VI. Features that were already represented as a polygon, but not captured in the forest inventory, were also added into the landbase.

Many datasets were used to create the final landuse footprint; the process used to extract the features and incorporate landuse activity also ensured that data duplication was kept to a minimum. If the feature was already captured in the forest inventory, then it was disregarded. All 3D seismic activities were also ignored, as the footprint had no impact on the forest inventory. The following lists the layers used to generate the final output:

- Seismic Activity
  - 3D AVI seismic lines
  - AVI linear base layer
  - Evergreen seismic
  - Evergreen 3D seismic
- Transportation
  - Internal Al-Pac woodlands information system
  - Alberta vegetation inventory
  - AVI linear base layer
  - Evergreen road layer
- Well sites
  - Alberta vegetation inventory
  - Evergreen industrial layer
- Pipeline
  - Alberta vegetation inventory
  - Evergreen utility layer

Preparation of this data layer was performed in March 2006. All Evergreen and internal Al-Pac woodlands information system would be current to that date. AVI is current to January 2006.



**Figure 1-9. Overview of Oil and Gas exclusions across FMA area.**

### 1.5.4 Harvesting Activity (Cutblocks)

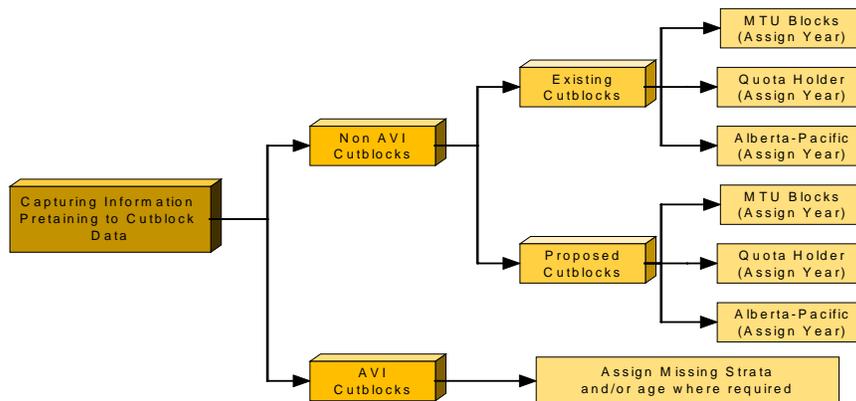
This phase of the landbase determination process was used to identify any recent harvesting activity not currently captured in the existing inventory, and to integrate additional information pertaining to inventoried blocks. The majority of existing cutblocks were assigned to the timber harvesting landbase with a valid regenerating yield class, landbase designation, age class and appropriate regeneration lag (Figure 1-12). The one exception is cutblocks harvested prior to 1991 with no current forest label. These older blocks were excluded from the timber harvesting landbase and assigned to the “Non-Forested Cutblock” stratum, as they have not satisfied the appropriate regeneration standards.

The Timber Supply Analysis (TSA) for the FMA area (‘J’ Units) incorporates a spatial sequencing component. The integration of existing cutblocks is therefore essential to ensure that model sequencing is in accord with the existing operating plans. This step also provides an important link between long-term annual allowable cut (AAC) estimation and current short-term operational planning efforts. This approach requires geographic links between various sources of harvest block information and the existing AVI.

Data pertaining to existing cutblocks originated from Alberta-Pacific, the Quota Holders and Alberta SRD. This link allows accurate landbase assignments, based on pre-harvest conditions and post-harvest treatments.

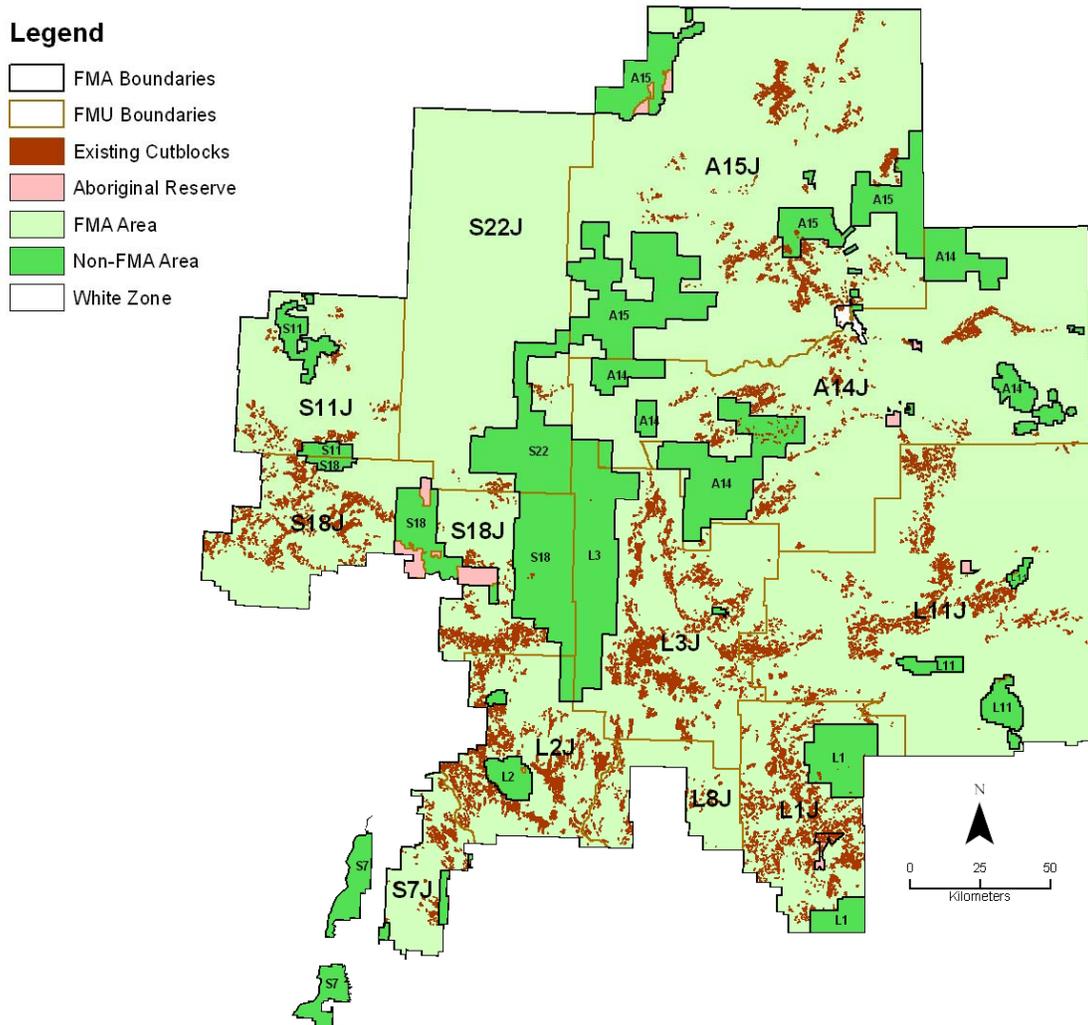
#### 1.5.4.1 Capturing Missing Information

Several sources of information were used in the development and subsequent update of the cutblock database. Figure 1-10 below illustrates the sources used to capture the missing cutblock information and provides some insight as to how the data sources were used.



**Figure 1-10. Information sources used in capturing cutblock information.**

Although much of the required information was captured through the update process, there were still several cutblocks that required additional information to ensure that proper strata and age classes were assigned. To capture this missing information, cutblock maps were generated and the missing block attributes were assigned by Alberta-Pacific and the various Quota Holders. Final cutblock maps were then generated for final review to ensure information quality. Figure 1-11 shows the distribution of existing harvest blocks across the FMA.



**Figure 1-11. Distribution of existing harvest activity across AVI FMUs.**

#### **1.5.4.2 Cutblock Classification**

Strata designations were assigned based solely on existing strata. Deciduous cuts were assigned no regeneration delay, whereas non-forested post-1991 conifer blocks were assigned a 5-year regeneration lag (Figure 1-12). Regenerating cover types were assigned in a systematic manner based upon the year in which they were harvested. Figure 1-12 below illustrates the process used to assign strata and age.

The AVI was the principal layer used to assign labels to regenerating cutblocks. Where available, additional stand regeneration information was used, specifically, Millar Western's Regenerated Stand Inventory (RSI) data for FMU L3 (see Appendix VII). Millar Western provided a RSI data layer that spatially identified the regeneration blocks along with the associated strata and age. This RSI data was added to the netdown process as a new layer and the associated information was used to override the AVI for cutblock assignment (Figure 1-12).

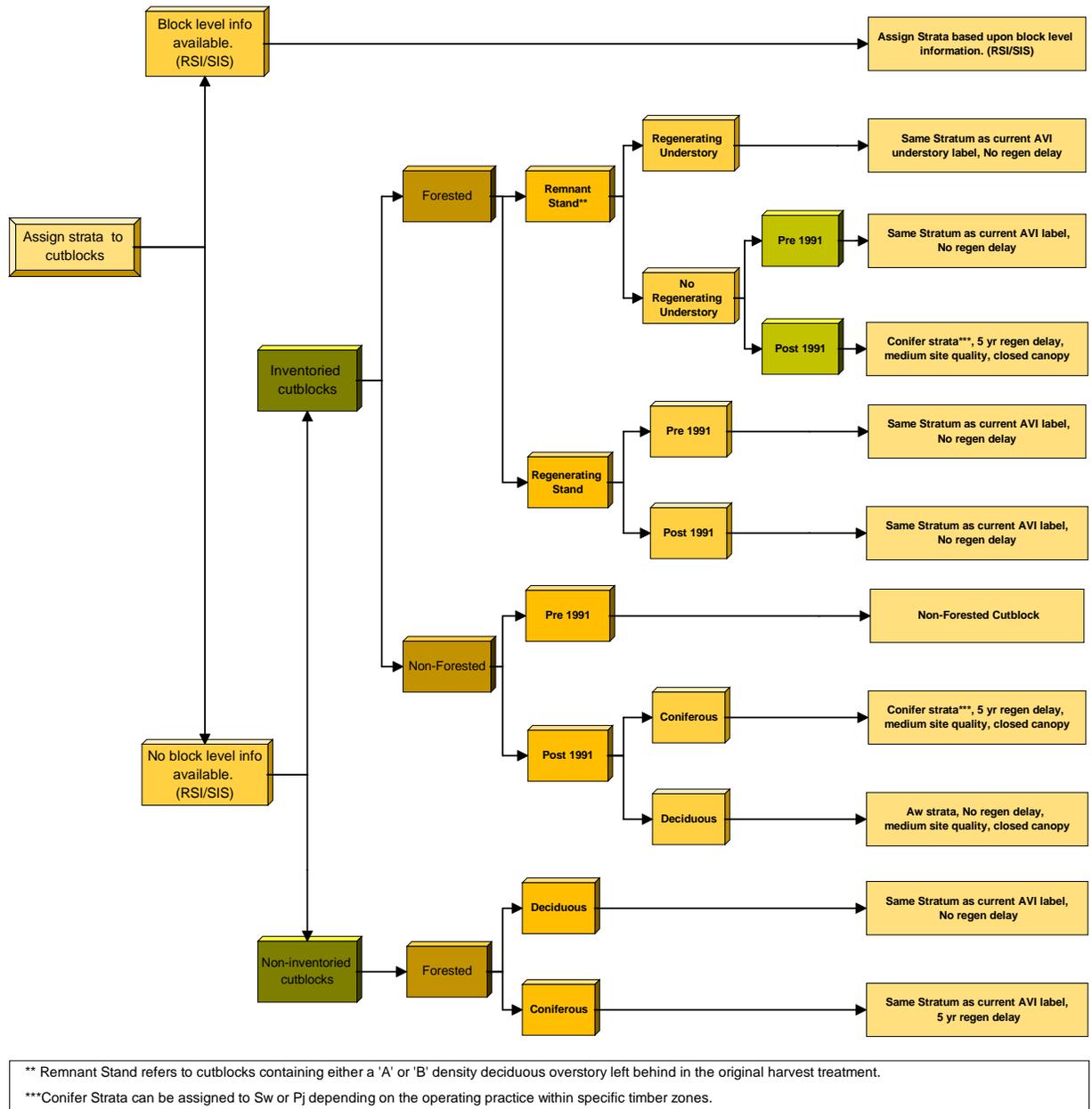


Figure 1-12. Cutblock strata and age assignment rules.

## 1.6 Integration of Landscape Planning Information

Integrating of additional landscape information was used to facilitate information requirements for comprehensive forest modeling. Additional information included:

FMA / FMU / Operating Unit Boundaries;  
Natural Sub-Regions;  
Maintain Our Forest (MOF) Blocks;  
Grazing Leases/Permits;  
Planned Harvest Blocks/Areas (2006+);  
Summer Ground Classification;  
Caribou Zones;  
Alberta-Pacific Operational Planning Unit Boundaries; and  
MOSA.

The distribution of the integrated landscape planning information across the FMA area is presented in Figure 1-13, Figure 1-14 and Figure 1-15.

### 1.6.1 FMA / FMUs / Operating Units

**Source:** FMA/FMU – Alberta SRD  
: Operating Units – Alberta Pacific  
**Acquisition Date:** FMA/FMU – May 2000 – Updated April 2005  
: Operating Units – December 2006  
**Effective Date:** FMA/FMU – May 2000 – Updated April 2005  
: Operating Units – 2006

This information was required to measure, track, and control harvest levels, harvest scheduling and individual forest values within the planning environment. Al-Pac operating units were not used to control the TSA model.

### 1.6.2 Natural Sub-Region

**Source:** Alberta Environmental Protection  
**Acquisition Date:** February 2000  
**Effective Date:** Unknown

Natural sub-region was incorporated to facilitate forest stratification within the planning environment. The layer also allowed tracking and controlling of forest values by ecological unit. This dataset was not used in the analysis; however it remains in the netdown as a legacy layer.

### 1.6.3 Maintain Our Forest (MOF) Blocks

**Source:** Alberta Environmental Protection

**Acquisition Date:** 1999 and 2006

**Effective Date:** Unknown

In the 1980's a government program was put in place to conduct trials on establishing conifer on deciduous dominated sites. Although within the current inventory these blocks may be assigned a deciduous cover type, they are treated as part of the non-FMA conifer landbase. In accordance with paragraph 4(g) of the FMA, these blocks are outside the FMA area. A digital map of the blocks was geographically linked to the AVI. The locations of the MOF Blocks are presented in Figure 1-13. In 2006 Vanderwell used an RSI inventory to update the AVI for MOF L2 cutblocks.

### 1.6.4 Grazing Leases

**Source:** Evergreen Consulting – Calgary AB

**Acquisition Date:** March 2000

**Effective Date:** Unknown

Grazing leases surrounding the FMA were integrated into the netdown process through a sequence of digital overlays that incorporated the digital boundaries with the AVI. Although several land uses exist within these grazing areas, harvesting activity is permitted once all affected parties have been consulted. Within the current inventory, these areas are a part of the non-FMA conifer landbase and in accordance with the FMA, these areas are outside the FMA area. The locations of the grazing leases are presented in Figure 1-13.

### 1.6.5 Planned Harvest Blocks / Areas (2006+)

**Source:** Alberta-Pacific

**Acquisition Date:** QII-QIII 2006

**Effective Date:** September 2006

Integration of the planned harvest block data will ensure that block sequencing is in agreement with current and existing operating plans. Data sources were acquired from Alberta-Pacific, the various embedded Quota Holders within the FMA and Alberta SRD.

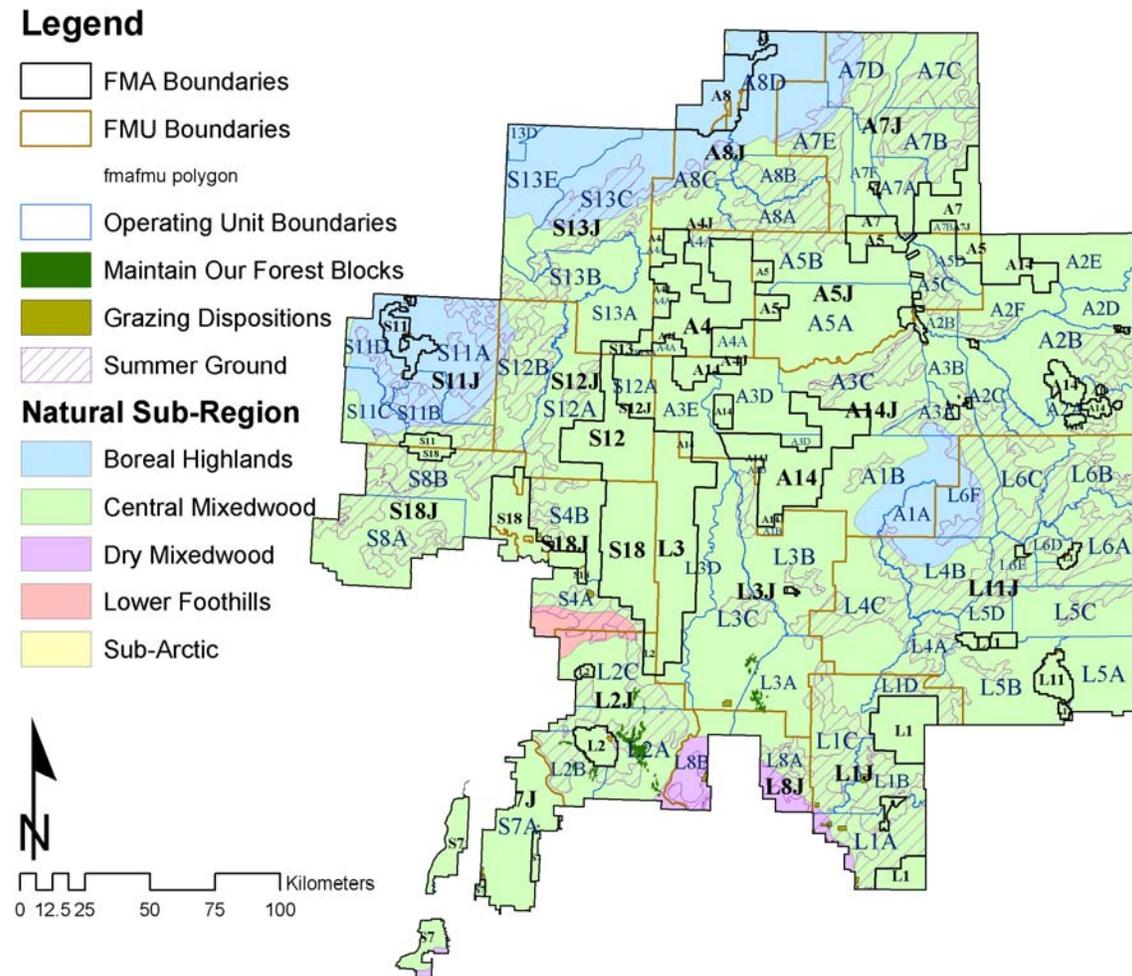
### 1.6.6 Summer Ground Classification

Source: Alberta-Pacific

Acquisition Date: October 2000

Effective Date: Unknown

Integration of this data will ensure that the sequencing phase of the analysis agrees with current operational harvesting practices. This dataset was not used in the analysis; however it remains in the netdown as a legacy layer.



**Figure 1-13. Distribution of integrated landscape planning areas across the FMA area.**

(Note: 1.66 Dataset not utilized in preparation of the SHS)

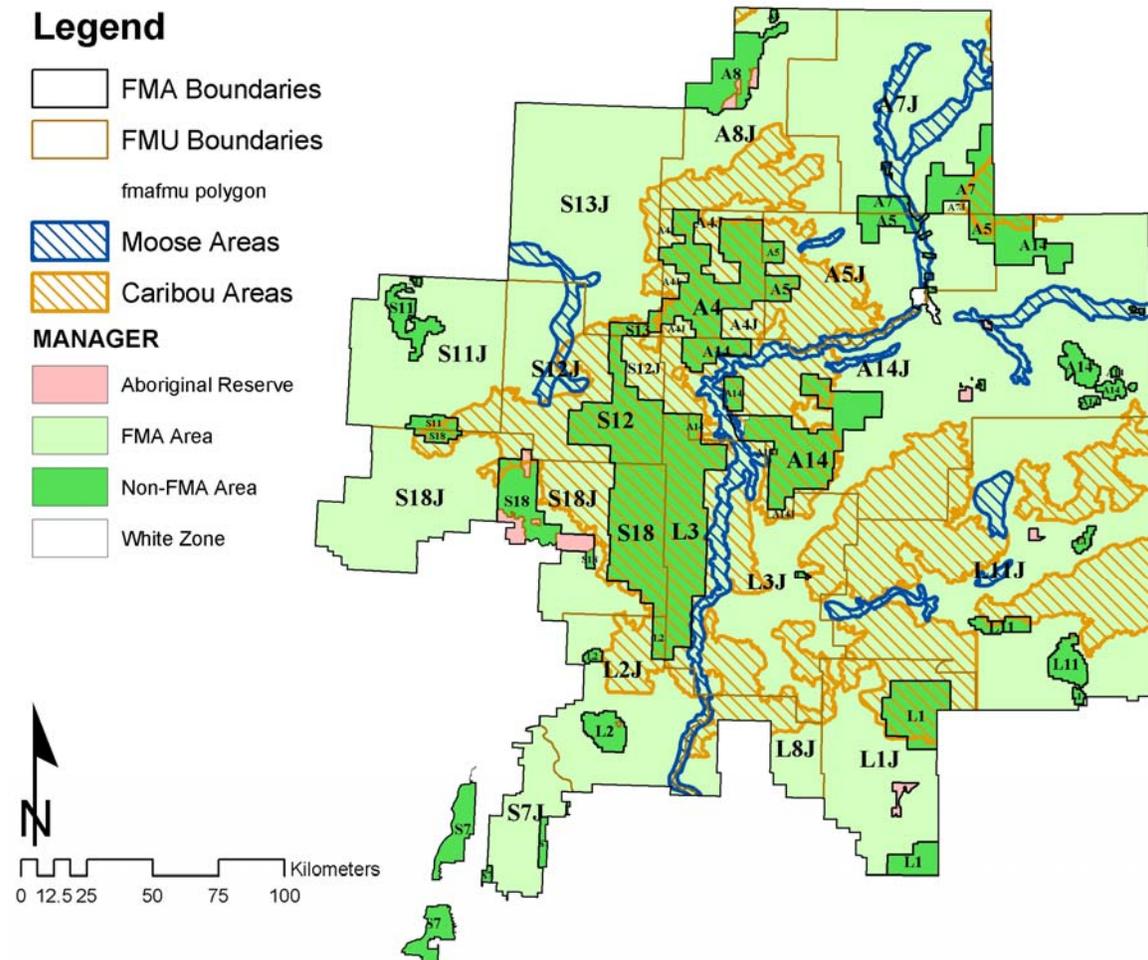
### 1.6.7 Caribou Zones and Ungulate Winter Zones

Source: Alberta-Pacific

Acquisition Date: December 2001

Effective Date: Unknown

Addition of the caribou zones and ungulate habitat will allow planners to evaluate and if necessary modify the level and type of harvesting within these areas. This dataset was not used in the analysis; however it remains in the netdown as a legacy layer.



**Figure 1-14. Distribution of caribou zones and ungulate winter zones information across the FMA area.**



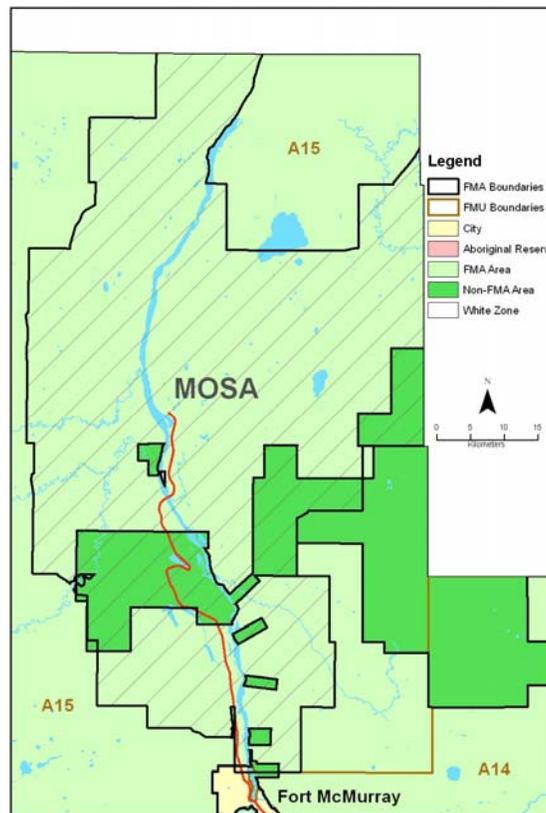
### 1.6.9 MOSA Area – Future Development Areas

**Source:** Alberta-Pacific & SRD

**Acquisition Date:** Q1 2006; updated March 2007

**Effective Date:** March 2007

The mineral oil sands area (MOSA) layer was a composition of spatial data from the Energy and Utilities Board and the FMP Approval Letter Map, plus consultation from Al-Pac's Integrated Land Services department. The MOSA area (J + Non-J) is approximately 395,000 ha. The information will facilitate the development of the future MOSA GDPs. (The area boundary is dynamic and dependent on energy sector economics) The current MOSA area within A15 is presented in Figure 1-16.



**Figure 1-16. MOSA Area within FMU A15.**

### 1.7 GIS Processing and Sliver Polygon Removal

The GIS processing phase of the landbase determination process involved 24 overlays with various data layers (Table 1-11). All data layers were projected using the Universal Transverse Mercator projection, Zone 12 and a NAD83 datum. The overlays were performed using a fuzzy tolerance of 0.01 meters to ensure data consistency. The

resultant landbase coverage showed that polygon numbers increased two or three times over the initial number of polygons in the AVI. To reduce the complexity and processing time required while keeping in mind the operational realism of the resultant landbase file, sliver polygons were eliminated. Exploratory analysis showed that more than half of the newly created polygons were slivers. Slivers were removed by first identifying all polygons that were less than 0.1 ha, and had a perimeter less than 600 meters. Polygons meeting these criteria could then be merged into adjacent polygons while keeping hard boundaries<sup>8</sup> (Table 1-11) intact. Removing the sliver polygons required using the ELIMINATE command within the ARC/INFO™ environment to eliminate arcs and force sliver polygons to merge into adjacent polygons. In the sliver elimination process the sliver polygon is assigned the attributes of the larger polygon with which it merges. Results of the sliver removal process are summarized in Appendix VIII. The results present polygon and cover group area distributions before and after the sliver removal process. The results show that the sliver removal process reduces complexity of the database without significantly affecting the integrity of the inventory. Note, additional layers were added since the 2002/03 process (TLE, FireSmart, Swan Buffers); these layers would be considered as soft boundaries as the TLE is not official and the FireSmart and Swan Buffers are interpreted.

**Table 1-11. Overview of data layers utilized in landbase determination process.**

Table Index	Data Layer	Boundary Type	Table Index	Data Layer	Boundary Type
1	AVI Forest Cover	Soft	13	Fire Update	Hard
2	Private Land	Hard	14	Oil/Gas Update	Hard
3	Protected Notations	Hard	15	Harvest Update	Soft
4	PSP Buffers	Hard	16	FMA/FMU/Operating Unit Boundaries	Hard
5	Provincial Park/Natural Area	Hard	17	Natural Sub-Region	Soft
6	Aboriginal Reserve	Hard	18	MOF Blocks	Hard
7	Ecological Reserve	Hard	19	Grazing Leases	Hard
8	Liege River Protected Area	Hard	20	Proposed Blocks and Planning Areas	Soft
9	River Breaks	Soft	21	Summer Ground	Soft
10	Steep Slopes	Hard	22	Caribou and Ungulate Winter Zones	Soft
11	Watercourse Buffers	Hard	23	Alberta-Pacific Planning Units	Soft
12	Big Bend IRP Lake Buffers	Hard	24	Oil Sands – Proposed Withdrawals	Soft

## 1.8 Development of the Netdown Database

The final netdown database was developed by stratifying the land base for timber supply modeling through database programming (Visual FoxPro™). The structure of the netdown database and the FMA area landbase determination process is contained in Appendix IX and Appendix X.

The following sections describe the general logic and assumptions associated with each step. The structure of the final netdown database is outlined in Appendix IX and

<sup>8</sup> Hard lines cannot be removed or dissolved in the sliver removal process; soft lines may be dissolved if required.

Appendix X. The final FMA area netdown summary is presented in section 1.8.8 (Table 1-17) of this document.

### 1.8.1 Develop Yield Classes

Developing yield classes for the FMA area first required that each inventory polygon be classified in accordance with characteristics necessary to determine the yield class to which it belonged. Yield class assignment involved the establishment of two primary stand characteristics:

- Overstory and understory cover types; and
- Leading conifer species.

The following sections detail the process of assigning polygons to yield classes through cover type and leading conifer determination.

#### 1.8.1.1 Determine Overstory and Understory Cover Types

The AVI does not carry a cover group attribute; this attribute was developed as a function of the tree species and their associated crown closure percentage. Deciduous and coniferous percentage crown closure for both overstory and understory layers was tallied for each record in the AVI. The resulting characteristics were used to assign broad cover groups. The assignment rules are presented in Table 1-12. In agreement with Appendix C of the Forest Management Agreement, all 50-50 stands are assigned to the coniferous/deciduous (CD) cover group.

**Table 1-12. Summary of rules used to assign broad cover groups to AVI.**

Broad Cover Group	Crown Closure (10% Classes)	
	Deciduous	Conifer
C	0 - 20	80 - 100
CD	30 - 50	50 - 70
DC	60 - 70	30 - 40
D	80 - 100	0 - 20

**1.8.1.2 Determine Leading Conifer Species**

The stratification process identified the leading conifer species for yield class assignment. The method employed was to select the first leading conifer species from the AVI attribute list for each polygon.

**1.8.1.3 Assign Yield Classes**

Yield classes were assigned according to the rules summarized in Table 1-13.

**Table 1-13. Rules used to define yield classes.**

Broad Cover Group	Yield Class	Inventory Defining Characteristics (AVI)					
		Cover Group		Leading Conifer <sup>9</sup>	Stand Density	TPR	FMA Area Zones
		Over	Under				
Deciduous Types							
	1-3 – Aw-Composite	D	---	None	ABCD	U,F,M,G	All
	4 – Aw-S-O	D	---	Sw/Sb/Fb	AB	U,F,M,G	All
	5 – Aw-S-C-S	D	---	Sw/Sb/Fb	CD	U,F,M,G	South
	6 – Aw-S-C-N	D	---	Sw/Sb/Fb	CD	U,F,M,G	North
	7 – Aw-Pj	D	---	Pj	ABCD	U,F,M,G	All
Mixedwood Types – Deciduous Coniferous Types & Coniferous Deciduous Types							
	8 – AwS-S	DC	---	Sw/Sb/Fb	ABCD	U,F,M,G	South
	9 – AwS-N	DC	---	Sw/Sb/Fb	ABCD	U,F,M,G	North
	10 – PjAw/AwPj	DC/CD	---	Pj	ABCD	U,F,M,G	All
	11 – SAw-S	CD	---	Sw/Sb/Fb	ABCD	U,F,M,G	South
	12 – SAw-N	CD	---	Sw/Sb/Fb	ABCD	U,F,M,G	North
Coniferous Types							
	13 – Sw-O	C	---	Sw/Fb	AB	U,F,M,G	All
	14 – Sw-C-FM	C	---	Sw/Fb	CD	U,F,M	All
	15 – Sw-C-G	C	---	Sw/Fb	CD	G	All
	16 – Sb-O	C	---	Sb	AB	U,F,M,G	All
	17 – Sb-C-FM	C	---	Sb	CD	U,F,M	All
	18 – Sb-C-G	C	---	Sb	CD	G	All
	19 – Pj-O-C-M	C	---	Pj	ABCD	U,F,M,G	All
	21 – Pj-C-G	C	---	Pj	CD	G	All
Deciduous with Understory							
	22 – Aw-U-FM	D	C/CD/DC	None/Pj	ABCD	U,F,M	All
	23 – Aw-U-G	D	C/CD/DC	None/Pj	ABCD	G	All
	24 – Aw-S-U-S	D	C/CD/DC	Sw/Sb/Fb	ABCD	U,F,M,G	South
	25 – Aw-S-U-N	D	C/CD/DC	Sw/Sb/Fb	ABCD	U,F,M,G	North
Non-Commercial Coniferous Types							
	26 – Lt			Lt	ABCD	U,F,M,G	All
Non-Forested Yield Classes							
	200 – NFCC	Non-Forested Cutblocks			See definitions in:		
	201 – NFALL	Non-Forested Natural Disturbances			Table 1-3. Non-forest land classes		
	300 – NFV	Non-Forested Vegetated			defined using AVI		
	400 – AV	Anthropogenic Vegetated					
	500 – ANV	Anthropogenic Non-Vegetated					
	600 – NNV	Naturally Non-Vegetated					

**Legend**

- O = Open Crown Closure -A&B Density
- C = Closed Crown Closure -C&D Density
- U = Deciduous with Conifer Understory
- South = FMUs S7, S18, L1, L2, L3, L11, L8
- North = FMUs S11, S22, A14, A15
- F = Fair Site
- M = Medium Site
- G = Good Site

<sup>9</sup> Leading Conifer (as described in section 1.8.1.2) does not mean that the stand is conifer dominated; it is used to identify the leading conifer component within the stand.

## 1.8.2 Apply Exclusion Rules

Previous sections described how the exclusions were defined utilizing various sources of data. Developing the netdown database required pulling the exclusions into a thematic classification to facilitate forest modeling. The method used to structure the exclusions for timber harvest planning was sequenced as follows:

- Create a theme to track areas that prohibit timber harvesting;
- Create a theme to track inoperable or isolated areas / recently disturbed areas; and
- Create a theme to track operating ground rules (watercourse and IRP buffers).

Exclusions were not mutually exclusive and overlaps occurred. Exclusions were ordered in a hierarchical list to facilitate assignments and netdown summaries. The hierarchy was built with no specific preferences toward any one exclusion type. The sole intent was to ensure that the process is systematic, explicit and reproducible. Table 1-14 outlines the hierarchy used for applying terrestrial landbase exclusions only.

**Table 1-14. Summary of exclusion hierarchy used in terrestrial landbase netdown only.**

<b>Table Index</b>	<b>Exclusion</b>	<b>Theme</b>	<b>Code</b>	<b>Hierarchy</b>
1	Provincial Parks and Natural Areas	Prohibits Timber Harvesting	PARK	1
2	Aboriginal Reserve	Prohibits Timber Harvesting	AB-RES	2
3	Ecological Reserve	Prohibits Timber Harvesting	ER-RES	3
4	Protected Notations	Prohibits Timber Harvesting	PNT-N	4
5	PSP Buffers	Prohibits Timber Harvesting	PSP-BUF	5
6	Recently Burnt Area <sup>10</sup>	Recently Disturbed Stand Area	FIRE <sup>10</sup>	6
7	Recent Oil & Gas Activity	Recently Disturbed Stand Area	OIL	7
8	Watercourse Buffers	Operating Ground Rules	BUF	8
9	Steep Slopes	Inoperable / Isolated Stands	SLOPE	9
10	Isolated Stands	Inoperable / Isolated Stands	ISO	10
11	Non-Forested Cutblocks	Inoperable / Isolated Stands	NFCC	11
12	Non-Forested Natural Disturbances	Inoperable / Isolated Stands	NFALL	12
13	Non-Forest Vegetated	Inoperable / Isolated Stands	NFV	13
14	Anthropogenic Vegetated	Inoperable / Isolated Stands	AV	14
15	Anthropogenic Non-Vegetated	Inoperable / Isolated Stands	ANV	15
16	Naturally Non-Vegetated	Inoperable / Isolated Stands	NNV	16
17	Non-Commercial TPR	Inoperable / Isolated Stands	USITE	17
18	Non-Commercial Species	Inoperable / Isolated Stands	LARCH	18
19	Non-Commercial Site Index	Inoperable / Isolated Stands	UINDEX	19
20	Non-Commercial Density	Inoperable / Isolated Stands	UDENS	20
21	River Breaks (Deciduous Only)	Prohibits Timber Harvesting	DRIV-BRK	21
22	MOSA <sup>11</sup>	Prohibits Timber Harvesting	OIL-AP	22

<sup>10</sup>Burnt areas that have been harvested and reforested under the current reforestation guidelines are not currently removed from the timber harvesting landbase.

<sup>11</sup> The MOSA is liquidated in the TSA/SHS.

### 1.8.3 Horizontal Stand Adjustment

Horizontal stands occur when two or more strata exist within the same polygon and are dispersed in such a way that it is difficult, if not impossible, to individually classify each stratum. There are several different ways in which these horizontal stands can be dealt with in the netdown process. The approach applied here was to base yield class assignment on the dominant forest layer.

Three scenarios occur within AVI horizontal stands:

- 1) Harvestable overstory- Harvestable understory;
- 2) Un-harvestable overstory- Un-harvestable understory; and
- 3) Harvestable overstory- Un-harvestable understory.

The first scenario is addressed through assigning the entire polygon area to the layer occupying the larger percentage of the polygon. The second case scenario is of little concern here since these stands have already been addressed in the non-forest exclusions section. This leaves only the third scenario where yield class is based on harvestable overstory and polygon area was adjusted using an area-based reduction, proportional to the stand percentage classified as non-forested.

### 1.8.4 Landbase Assignments

Landbase is determined as a function of inventory cover type and administrative boundary. Table 1-15 below summarizes the landbase assignment rules used in the netdown.

**Table 1-15. Rules used to designate landbase.**

<b>Landbase</b>	<b>Broad Cover Group</b>	<b>FMU</b>
Coniferous	- C, CD - DC	ALL L2, L3, S18, S11, S7, L8, A14, A15
Deciduous	- D, DU - DC	ALL units A1 portion of A14, L11, S22, L1

### 1.8.5 Stand Age Assignments

Stand ages were derived using the stand origin field from the AVI. A field was added to the netdown database to track current stand age. Timber supply modeling begins in 2006, therefore current age is 2006 minus origin year.

Existing harvest blocks having no age information were assigned an age based on the rules summarised in Section 1.5.4.

Age class assignments, once identified, are placed into five year intervals for modeling purposes. To ensure that the modeling year is consistent with the timber supply start year, age classes are assigned assuming year 2006 is age 0 (Table 1-16).

**Table 1-16. Age class assignments by origin and modeling year.**

<b>Origin Year</b>	<b>Modeling Period Age</b>	<b>Origin Year</b>	<b>Modeling Period Age</b>
2001-2005	1	1921-1925	17
1996-2000	2	1916-1920	18
1991-1995	3	1911-1915	19
1986-1990	4	1906-1910	20
1981-1985	5	1901-1905	21
1976-1980	6	1896-1900	22
1971-1975	7	1891-1895	23
1966-1970	8	1886-1890	24
1961-1965	9	1881-1885	25
1956-1960	10	1876-1880	26
1951-1955	11	1871-1875	27
1946-1950	12	1866-1870	28
1941-1945	13	1861-1865	29
1936-1940	14	1856-1860	30
1931-1935	15	1851-1855	31
1926-1930	16		

### 1.8.6 Net Area Determination

Net stand area was equal to gross stand area less the area of stands flagged as private land and horizontal stands with a non-forested component. A field was added to the netdown database to track net area.

### 1.8.7 Adjust Cutblock Classification

Cutblocks required specific classification rules to prepare them for timber supply modelling. Yield class, age, and regeneration lag were required for each harvest block and depending on the source, different rules and assumptions were applied to harvested block classification. Section 1.5.4 summarises the assumptions and rules used for cutblock classification.

### 1.8.8 Generate Final Netdown Summary

Once all exclusions were identified and stratification was complete a netdown summary was prepared. Exclusions were not mutually exclusive and overlap existed. The exclusions were put in a hierarchical list to facilitate the netdown summaries. As mentioned previously, the hierarchy was built with no specific preferences toward any one exclusion type. The intent was to make the process systematic and reproducible. Table 1-14 outlines the hierarchy used for applying exclusions.

The results for areas inside and outside the Alberta-Pacific FMA boundary are presented in Table 1-17 <sup>12</sup>. Maps showing distribution of exclusions and harvestable cover types on the FMA area are presented in Appendix II. The AVI maps were generated using digital forest cover. It is important to remember that maps show only stand-level exclusions. The structure of the resultant netdown AVI database is presented in Appendix IX and Phase 3 database is presented in Appendix X.

---

<sup>12</sup> Area summaries were queried on the netdown database by summarising area [nha] while grouping by the [FMU] and [net\_label] fields.

**Table 1-17. Netdown summary for Alberta-Pacific FMA area.**

	Non-Forested Area(ha)	Forested Area(ha)	Total Area(ha)	Landbase (%)
<b>Prohibits/Precludes Timber Harvesting</b>				
Provincial Park	5,054.0	45,671.4	50,725.4	0.9%
Aboriginal Reserve	2,863.0	8,454.1	11,317.1	0.2%
Ecological Reserve	266.7	947.1	1,213.8	0.0%
Protected Notations (No Harvesting Permitted)	4,020.3	14,065.8	18,086.1	0.3%
PSP Buffers	44.3	703.6	747.9	0.0%
River Breaks	0.0	37,572.9	37,572.9	0.7%
Private Land	1,552.2	2,884.0	4,436.2	0.1%
<i>Sub-total</i>	<i>13,800.6</i>	<i>110,299.0</i>	<i>124,099.6</i>	<i>2.1%</i>
<b>Recently Disturbed Areas</b>				
Fire	447,597.3	0.0	447,597.3	7.7%
Oil and Gas	99,468.0	0.0	99,468.0	1.7%
<i>Sub-total</i>	<i>547,065.3</i>	<i>0.0</i>	<i>547,065.3</i>	<i>9.5%</i>
<b>Inoperable / Isolated Stands</b>				
Slope	3.7	19.1	22.9	0.0%
Isolated Harvestable stands	0.0	3,031.2	3,031.2	0.1%
Non-Forested (CC)	1,813.0	0.0	1,813.0	0.0%
Non-Forested Natural Disturbance	224,925.6	0.0	224,925.6	3.9%
Non-Forested Vegetated	193,975.0	0.0	193,975.0	3.4%
Anthropogenic Vegetated	14,747.2	0.0	14,747.2	0.3%
Anthropogenic Non-Vegetated	23,088.0	0.0	23,088.0	0.4%
Naturally Non-Vegetated	935.0	0.0	935.0	0.0%
Non-Commercial TPR	0.0	553,816.0	553,816.0	9.6%
Non-Commercial Species	0.0	572,796.5	572,796.5	9.9%
Non-Commercial Stand Density	0.0	71,583.5	71,583.5	1.2%
Non-Commercial Site Index	0.0	1,053,994.1	1,053,994.1	18.2%
Horizontal Stand Adjustment	1,405.6	0.0	1,405.6	0.0%
<i>Sub-total</i>	<i>460,893.2</i>	<i>2,255,240.3</i>	<i>2,716,133.5</i>	<i>47.0%</i>
<b>Water Course Buffers</b>				
Buffer	58,980.9	70,094.2	129,075.1	2.2%
<i>Sub-total</i>	<i>58,980.9</i>	<i>70,094.2</i>	<i>129,075.1</i>	<i>2.2%</i>
<b>Aquatic Features</b>				
Rivers	24,958.6	0.0	24,958.6	0.4%
Lakes	123,025.1	0.0	123,025.1	2.1%
Flooded Areas	24,074.0	0.0	24,074.0	0.4%
<i>Sub-total</i>	<i>172,057.7</i>	<i>0.0</i>	<i>172,057.7</i>	<i>3.0%</i>
<b>Timber Harvesting Landbase (MOSA)</b>				
Deciduous	0.0	40,998.5	40,998.5	0.7%
Deciduous / Coniferous	0.0	7,861.8	7,861.8	0.1%
Coniferous / Deciduous	0.0	7,569.9	7,569.9	0.1%
Coniferous	0.0	54,216.1	54,216.1	0.9%
Deciduous w/ Conifer Understory	0.0	40,630.4	40,630.4	0.7%
<i>Sub-total</i>	<i>0.0</i>	<i>151,276.7</i>	<i>151,276.7</i>	<i>2.6%</i>
<b>Timber Harvesting Landbase</b>				
Deciduous	0.0	620,348.3	661,346.8	11.4%
Deciduous / Coniferous	0.0	105,602.0	113,463.8	2.0%
Coniferous / Deciduous	0.0	104,594.7	112,164.6	1.9%
Coniferous	0.0	699,660.7	753,876.8	13.0%
Deciduous w/ Conifer Understory	0.0	407,598.4	448,228.7	7.8%
<i>Sub-total</i>	<i>0.0</i>	<i>1,937,804.0</i>	<i>1,937,804.0</i>	<i>33.5%</i>
<b>Grand Total</b>	<b>1,252,797.6</b>	<b>4,524,714.2</b>	<b>5,777,511.8</b>	<b>100.0%</b>

**Table 1-18. Netdown summary for 'Non-J' area outside FMA area.**

	Non-Forested Area(ha)	Forested Area(ha)	Total Area(ha)	Landbase (%)
<b>Prohibits/Precludes Timber Harvesting</b>				
Provincial Park	15,150.7	19,842.2	34,993.0	3.2%
Aboriginal Reserve	3,058.2	12,239.6	15,297.8	1.4%
Ecological Reserve	0.0	8.9	9.0	0.0%
Protected Notations (No Harvesting Permitted)	1,405.0	10,228.3	11,633.3	1.1%
PSP Buffers	0.6	43.8	44.4	0.0%
River Breaks	0.0	433.2	433.2	0.0%
Private Land	705.7	996.7	1,702.4	0.2%
<i>Sub-total</i>	<b>20,320.3</b>	<b>43,792.8</b>	<b>64,113.1</b>	<b>5.9%</b>
<b>Recently Disturbed Areas</b>				
Fire	28,972.1	0.0	28,972.1	2.7%
Oil and Gas	9,513.5	0.0	9,513.5	0.9%
<i>Sub-total</i>	<b>38,485.6</b>	<b>0.0</b>	<b>38,485.6</b>	<b>3.5%</b>
<b>Inoperable / Isolated Stands</b>				
Slope	0.0	1.1	1.1	0.0%
Isolated Harvestable stands	0.0	455.5	455.5	0.0%
Non-Forested (CC)	457.0	0.0	457.0	0.0%
Non-Forested Natural Disturbance	49,484.9	0.0	49,484.9	4.6%
Non-Forested Vegetated	185,048.4	0.0	185,048.4	17.0%
Anthropogenic Vegetated	2,367.7	0.0	2,367.7	0.2%
Anthropogenic Non-Vegetated	17,661.1	0.0	17,661.1	1.6%
Naturally Non-Vegetated	39.9	0.0	39.9	0.0%
Non-Commercial TPR	0.0	124,882.5	124,882.5	11.5%
Non-Commercial Species	0.0	128,449.0	128,449.0	11.8%
Non-Commercial Stand Density	0.0	4,961.0	4,961.0	0.5%
Non-Commercial Site Index	0.0	207,548.2	207,548.2	19.1%
Horizontal Stand Adjustment	628.3	0.0	628.3	0.1%
<i>Sub-total</i>	<b>255,687.3</b>	<b>466,297.3</b>	<b>721,984.5</b>	<b>66.5%</b>
<b>Water Course Buffers</b>				
Buffer	12,316.5	9,758.9	22,075.4	2.0%
<i>Sub-total</i>	<b>12,316.5</b>	<b>9,758.9</b>	<b>22,075.4</b>	<b>2.0%</b>
<b>Aquatic Features</b>				
Rivers	1,330.9	0.0	1,330.9	0.1%
Lakes	113,898.8	0.0	113,898.8	10.5%
Flooded Areas	842.1	0.0	842.1	0.1%
<i>Sub-total</i>	<b>116,071.8</b>	<b>0.0</b>	<b>116,071.8</b>	<b>10.7%</b>
<b>Timber Harvesting Landbase (MOSA)</b>				
Deciduous	0.0	3,833.7	3,833.7	0.4%
Deciduous / Coniferous	0.0	636.3	636.3	0.1%
Coniferous / Deciduous	0.0	663.3	663.3	0.1%
Coniferous	0.0	4,462.0	4,462.0	0.4%
Deciduous w/ Conifer Understory	0.0	1,918.4	1,918.4	0.2%
<i>Sub-total</i>	<b>0.0</b>	<b>11,513.8</b>	<b>11,513.8</b>	<b>1.1%</b>
<b>Timber Harvesting Landbase</b>				
Deciduous	0.0	29,461.4	29,461.4	2.7%
Deciduous / Coniferous	0.0	8,479.8	8,479.8	0.8%
Coniferous / Deciduous	0.0	10,279.6	10,279.6	0.9%
Coniferous	0.0	53,854.4	53,854.4	5.0%
Deciduous w/ Conifer Understory	0.0	9,614.8	9,614.8	0.9%
<i>Sub-total</i>	<b>0.0</b>	<b>111,690.0</b>	<b>111,690.0</b>	<b>10.3%</b>
<b>Grand Total</b>	<b>442,881.5</b>	<b>643,052.7</b>	<b>1,085,934.3</b>	<b>100.0%</b>

**Appendix I: Phase 3 Landbase Determination Process**

**Appendix II: Landbase Netdown Maps and Tables**

**Appendix III: Private Land Reductions**

**Appendix IV: Protected Notation Locations Across FMA Area**

**Appendix V: Isolated Stand Analysis**

**Appendix VI: Oil and Gas Documentation**

**Appendix VII: Millar Western RSI Documentation**

**Appendix VIII: Results of Sliver Removal Process**

**Appendix IX: AVI Netdown Database Data Dictionary**

**Appendix X: Phase 3 Netdown Database Data Dictionary**



ALBERTA  
PACIFIC

FOREST INDUSTRIES INC

---

---

**Appendix I: Phase 3 Inventory Landbase Determination Process**

---

---

## Table of Contents – Appendix I

<b>1</b>	<b>PHASE 3 INVENTORY LANDBASE DETERMINATION PROCESS .....</b>	<b>1</b>
<b>1.1</b>	<b>Forest That Prohibits Timber Harvest.....</b>	<b>1</b>
<b>1.2</b>	<b>Inoperable or Isolated Stands .....</b>	<b>2</b>
1.2.1	Non-Forest Exclusions .....	2
1.2.2	Subjective Deletions.....	2
1.2.3	Sensitive Slopes.....	3
1.2.4	Isolated Stands.....	3
<b>1.3</b>	<b>Operating Ground Rules .....</b>	<b>4</b>
<b>1.4</b>	<b>Integration of Recent Landscape Disturbances.....</b>	<b>4</b>
1.4.1	Recent Fire Activity .....	4
1.4.2	Oil and Gas Activity.....	4
1.4.3	Harvesting Activity .....	4
1.5	Integration of Landscape Planning Information	5
1.6	Development of the Netdown Database	5
1.6.1	Develop Yield Classes	5
1.6.2	Apply exclusion rules	6
1.6.3	Landbase Assignments	7
1.6.4	Stand Age Assignments	7
1.6.5	Adjust Cut-Block Classification	7
1.6.6	Generate Final Summary of the Netdown	7

## List of Tables – Appendix I

Table 1.	Summary of process used to identify areas where timber harvesting is prohibited.	1
Table 2.	Summary of rules for classifying Phase 3 into AVI non-forest classes.	2
Table 3.	Phase 3 definition: Non-commercial coniferous stand densities.	2
Table 4.	Phase 3 definition: Non-commercial deciduous stand densities.	3
Table 5.	Phase 3 definition: Non-commercial species.	3
Table 6.	Phase 3 definition: Non-commercial site index (height-age relationship).	3
Table 7.	Phase 3 definition: Non-commercial timber productivity rating (TPR).	3
Table 8.	Landscape planning information Phase 3 Vs AVI.	5
Table 9.	Summary of Phase 3 exclusions and their relation to AVI exclusions.	6
Table 10.	Rules used to designate landbase.	7
Table 11.	Cutblock classification assignment.	7

### Phase 3 Inventory Landbase Determination Process

The most significant limitation associated with the Phase 3 inventory is its non-spatial format, which makes it impossible to perform spatial overlays. However the Phase 3 inventory does include a land status characteristic used to identify land incompatible with timber harvesting (i.e. Parks, Reserves, Private Land, etc.). Where landbase exclusions could not be identified due to information limitations, a percentage reduction was applied. The landbase determination process was completed using database programming (Visual FoxPro™) in the same manner as that applied to AVI data, outlined in Section 1.8 of the main Landbase Determination report.

The following sections describe the general logic and specific assumptions associated with each step as applied to the Phase 3 data. The final netdown summary which incorporated both Phase 3 and AVI information is presented in the main document summary tables.

### 1.1 Forest That Prohibits Timber Harvest

The AVI process used to identify land incompatible with timber harvesting was accomplished through spatial overlay that geographically linked all exclusion layers to the AVI. This overlay process was not possible when using the aspatial Phase 3, therefore the Phase 3 land status code and appropriate percentage reductions were implemented. Table 1 summarizes the substitutions made to identify areas where harvesting is prohibited.

**Table 1. Summary of process used to identify areas where timber harvesting is prohibited.**

<b>Exclusion Type</b>	<b>Phase 3 Inventory Approach</b>
Private Land	Land status = "PA"
Protected Notations	Refer to AVI approach (Landbase Determination document)
Parks and Natural Areas	Land Status = "PK" or "RA" or "WA" or "WP"
Aboriginal Reserves	Land Status = "MC" or "IR" or "IL"
Ecological Reserves	Land Status = "ER" or "ES" or "FD" or "FR" or "FW" or "LZ"
River Breaks	No Data Available
PSP Buffers	No Data Available

For parks yet to be updated in the Phase 3 Inventory which included the Birch Mountains and Gipsy Lake Wildland Provincial Parks, a manual identification process was used to extract the Phase 3 township and stand numbers associated with these parks. This list of townships and stand numbers was used to ensure parks were adequately captured in the landbase determination process.

## 1.2 Inoperable or Isolated Stands

The Phase 3 delineation of inoperable and isolated stands was based on the same four categories utilized for the AVI area:

- Non-Forest Exclusions
- Subjective Deletions
- Sensitive Slopes
- Isolated Stands

The sections below identify how the exclusions were identified within the Phase 3 database.

### 1.2.1 Non-Forest Exclusions

Non-forested cover group codes in the Phase 3 database were grouped to fit into the AVI non-forest classification. Table 2 presents the relationship between Phase 3 non-forest codes and the AVI classification.

**Table 2. Summary of rules for classifying Phase 3 into AVI non-forest classes.**

Non-Forest Land Class	Phase 3 Inventory Definition	
	Attribute	Value
Naturally Non-Vegetated	SP1	WA, BS, GL, RB, SA
Anthropogenic Non-Vegetated	SP1	CL
Anthropogenic Vegetated	SP1	CU
Non-Forest Vegetated	SP1	BR, CS, DS, FL, TM, GR, OM
Non-Forested Cutblocks	SP1	CC, SC
Non-Forested Natural Disturbances	SP1	BU, IK, VK, WF

### 1.2.2 Subjective Deletions

The AVI subjective deletion criteria applied had to be modified slightly to ensure compatibility with the Phase 3 Inventory. Tables 2 through 6 below summarise the Phase 3 definitions representative of the five AVI subjective deletions.

**Table 3. Phase 3 definition: Non-commercial coniferous stand densities.**

Leading Species	Stand Density Class		Stand Origin (year)	Stand Height (class)
	Overstory	Understory		
P, PL, PJ, SB, SW, FB	A	A or NONE	< 1950	<18

**Table 4. Phase 3 definition: Non-commercial deciduous stand densities.**

Leading Species	Stand Density Class	
	Overstory	Understory
A, AW, Pb, BW	A	A or NONE

**Table 5. Phase 3 definition: Non-commercial species.**

Leading Species
S1 = Lt or S2 = Lt or S3 = Lt or S4 = Lt

**Table 6. Phase 3 definition: Non-commercial site index (height-age relationship).**

Leading Species	Height Class	Origin (year)	Commercialism
Any	0	< 1950	Any
Any	1	< 1930	Any
Any	2	< 1930	U, H

**Table 7. Phase 3 definition: Non-commercial timber productivity rating (TPR).**

Leading Species	Commercialism	Site
SB,P,PL,PJ	U or H	F

### 1.2.3 Sensitive Slopes

For the AVI approach a digital elevation model was used to identify slopes greater than 45%. For the Phase 3 approach, slopes greater than 45% were identified through the slope attribute within the Phase 3 Inventory. All Phase 3 stands with a Slope code of 45 (SP = 45) were excluded from the timber harvesting landbase.

### 1.2.4 Isolated Stands

Isolated stands were not addressed in the Phase 3 landbase determination process due to absence of appropriate data. The decision not to identify isolated stands was also influenced by the fact that the area is only a minor portion of the FMUs, and there is significant access currently in place because of petroleum development activities.

### **1.3 Operating Ground Rules**

The Phase 3 approach addressed watercourse buffers by applying a percentage reduction to the net harvestable landbase. The actual percentage reductions were derived from the Lands and Forest Department LandPro system. The percentage reductions are specific to townships.

### **1.4 Integration of Recent Landscape Disturbances**

The Phase 3 approach developed to address recent landscape disturbances is described in the following sections.

#### **1.4.1 Recent Fire Activity**

The Phase 3 approach for addressing recent fires was simply to assume that the inventory includes all recent fire activity.

#### **1.4.2 Oil and Gas Activity**

The Phase 3 approach for addressing oil and gas depletions was to apply a percentage reduction to the landbase. The percentage reductions were derived through a thematic overlay of the current oil and gas information on the township grid. The percentage reductions are specific to townships.

Additionally in FMUs A5 and A7 a manual identification process was used to remove the Phase 3 area associated with active and proposed mining sites. This was accomplished by extracting the Phase 3 township and stand numbers associated with these sites. This list of townships and stand numbers were used to ensure active and proposed mining sites were adequately captured in the landbase determination process.

#### **1.4.3 Harvesting Activity**

The Phase 3 approach for addressing recent harvesting was to assume that the inventory accounts for all recent harvesting activity.

## 1.5 Integration of Landscape Planning Information

The Phase 3 approach for integrating additional landscape planning information was limited to the information available in Phase 3 Inventory database. Table 8 below identifies how the AVI planning layers were addressed in the Phase 3 process.

**Table 8. Landscape planning information Phase 3 Vs AVI.**

<b>FMA Planning Information</b>	<b>Phase 3 Approach</b>
FMA / FMU / Operating Compartment	FMA & FMU were derived from inventory characteristics ([F], [MU] and [MGR]). Operating Units is not applicable.
Natural Sub Region	No Data Available
Maintain Our Forest Blocks	Since all Phase 3 area is Non-J area it wasn't necessary to identify these MOF blocks.
Grazing Leases	Since all Phase 3 area is Non-J area it wasn't necessary to identify these grazing leases.
Planned Harvest Blocks / Areas (2001+)	Since Non-J analysis is non-spatial it wasn't necessary to integrate planned blocks.
Summer Ground Classification	No Data Available
Caribou Zones and Ungulate Winter Zones	No Data Available
Alberta-Pacific Planning Units	No Data Available

## 1.6 Development of the Netdown Database

Developing the final netdown database involved stratifying the land base for timber supply modeling. The steps are outlined below:

- Develop Yield Classes
- Apply Exclusion Rules
- Landbase Assignments
- Stand Age Assignments
- Adjust Cut-Block Classification
- Generate Final Summary of the Netdown

The following sections describe the assumptions associated with each step.

### 1.6.1 Develop Yield Classes

Developing yield classes for the Phase 3 landbase was similar to the process outlined in the landbase determination document. The major modifications were:

- Overstory and understory cover group did not have to be calculated because this characteristic is already a part of the Phase 3 Inventory.
- For the yield class stratification rules Phase 3 [site] characteristic replaced the AVI [TPR] characteristic.
- The non-forest classification rules had to be modified to fit Phase 3 Inventory characteristics. Table 2 (above – page 2) summarizes the rules used to identify AVI non-forest classes within the Phase 3 Inventory.

### 1.6.2 Apply exclusion rules

Phase 3 exclusions were structured to mimic the AVI thematic exclusions. The AVI used three themes to track exclusions. Table 9 summarizes how Phase 3 exclusions were fit to the AVI exclusion themes.

**Table 9. Summary of Phase 3 exclusions and their relation to AVI exclusions.**

AVI Exclusion Theme	Phase 3 Inventory Exclusions		
	Stand Level Exclusion	Percentage Reduction	No Data Available
<i>Prohibit Timber Harvesting</i>	<ul style="list-style-type: none"> <li>• Parks and Natural Areas</li> <li>• Aboriginal Reserves</li> <li>• Ecological Reserves</li> <li>• Protective Notations</li> <li>• Private Land</li> <li>• PSP Buffers</li> <li>• River Breaks (Decid Only)</li> </ul>		<ul style="list-style-type: none"> <li>• Athabasca and Clearwater River Breaks</li> </ul>
<i>Inoperable or Isolated Areas / Recently Disturbed Areas</i>	<ul style="list-style-type: none"> <li>• Steep Slopes</li> <li>• Non-Forested Cutblocks</li> <li>• Non-Forested Natural Disturbances</li> <li>• Isolated Stands</li> <li>• Non-Forest Vegetated</li> <li>• Anthropogenic Vegetated</li> <li>• Anthropogenic Non-Vegetated</li> <li>• Naturally Non-Vegetated</li> <li>• Non-Commercial Site Index</li> <li>• Non-Commercial Density</li> <li>• Non-Commercial Species</li> <li>• Non-Commercial TPR</li> </ul>	<ul style="list-style-type: none"> <li>• Recent Oil &amp; Gas Activity</li> </ul>	<ul style="list-style-type: none"> <li>• Recently Burned Area</li> </ul>
<i>Operating Ground Rules</i>		<ul style="list-style-type: none"> <li>• Watercourse Buffers</li> </ul>	

As with the AVI process, exclusions were ordered in a hierarchical list to facilitate assignments and netdown summaries. The Phase 3 approach was based on the same hierarchy reported in main landbase determination document.

### 1.6.3 Landbase Assignments

The Phase 3 approach for identifying landbase was similar to the AVI approach. Table 10 below summarizes the landbase assignment rules used in the Phase 3 netdown process.

**Table 10. Rules used to designate landbase.**

<b>Landbase</b>	<b>Broad Cover Group</b>
Coniferous	- C, CD, DC, DU
Deciduous	- D

### 1.6.4 Stand Age Assignments

Stand ages were derived using the stand origin field in the Phase 3 Inventory. The assignment rules were the same as presented in the landbase determination document. Timber modeling started in the year 2001 making the current age equal to 2001 minus year of origin.

### 1.6.5 Adjust Cut-Block Classification

The Phase 3 approach for cutblock assignments was developed to be consistent with the AVI approach. However due to information limitations, the process was simple when compared to the AVI process. The Phase 3 approach for assigning a yield class, age and landbase to every cut-block in the inventory is presented in Table 11.

**Table 11. Cutblock classification assignment.**

<b>Phase 3 Inventory Characteristics</b>		<b>Cutblock Assignment</b>
<b>[S1]</b>	<b>[ORGN]</b>	
“CC” or “SC”	< 1991	Non-Forested Cutblock. Will not be considered harvestable until a valid regeneration survey indicates a free to grow forest.
“CC” or “SC”	>= 1991	Yield class: Sw-Closed Canopy – Medium Site Age: 5-Year Regeneration Lag Landbase: Conifer Landbase

### 1.6.6 Generate Final Summary of the Netdown

As with the AVI approach, once all exclusions were identified and stratification was complete a netdown summary was prepared, and is included in the main document.



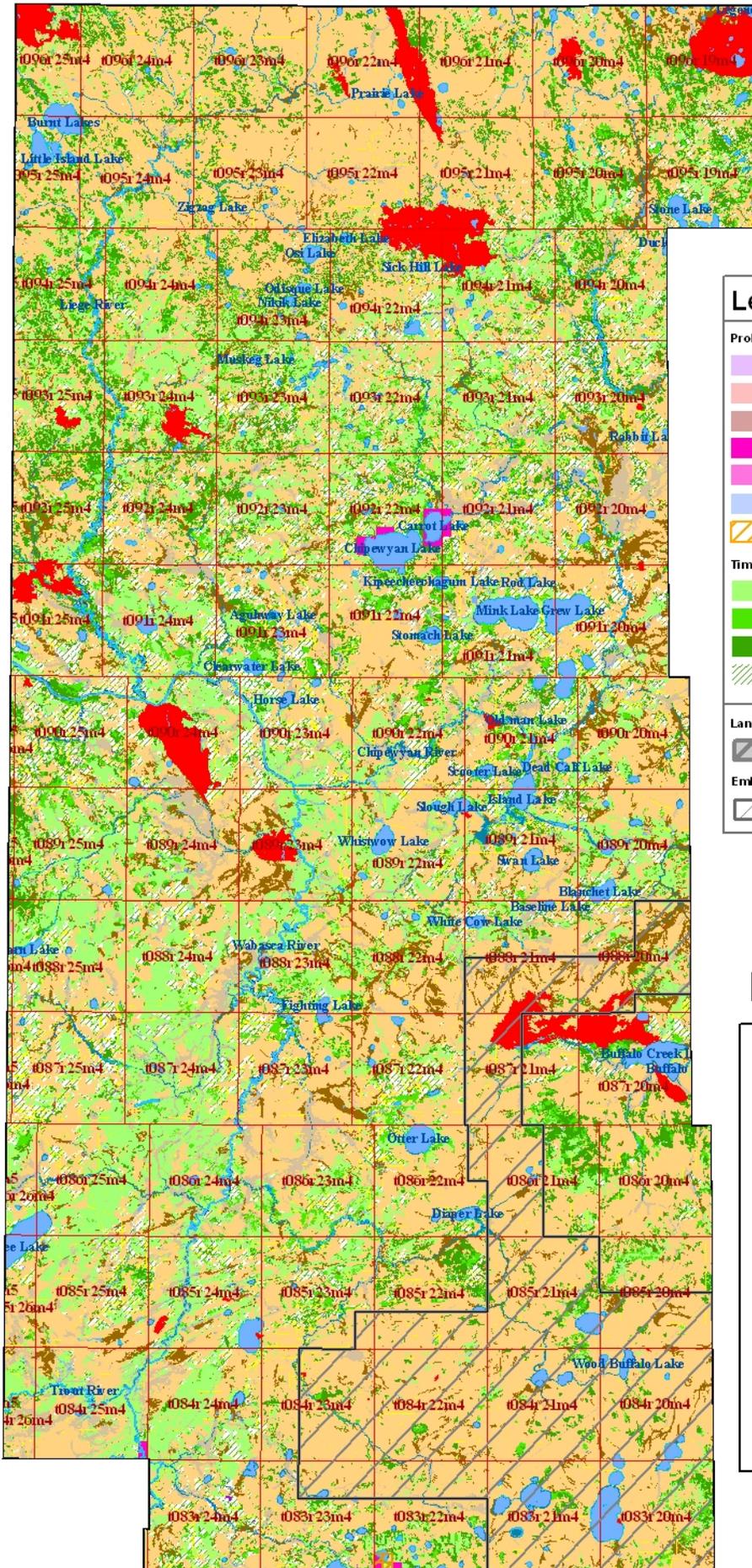
# Alberta-Pacific FMU S22

## Netdown Classification



ALBERTA-PACIFIC  
FOREST INDUSTRIES INC.

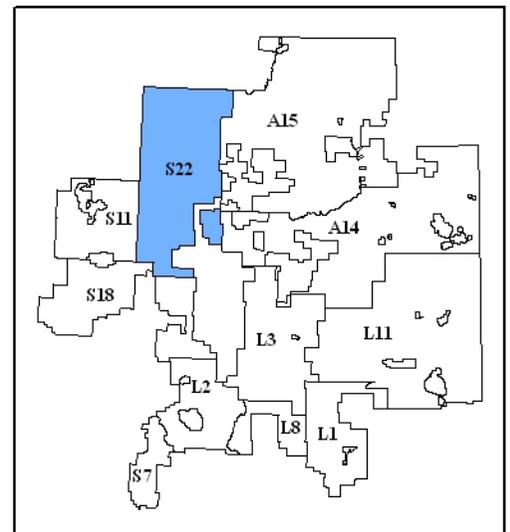
**Vanderwell**  
Contractors (1971) Ltd.



### Legend

<b>Prohibits Timber Harvesting</b>		<b>Recently Disturbed Areas</b>	
Provincial Park	Recent Fires	Oil and Gas	
Aboriginal Reserve	Slopes > 45%	Isolated Stands	
Ecological Reserve	Non-Forested Pre-91 Cutblocks	Non-Forested Natural Disturbance Areas	
Protective Notations	Non-Forested Stand Area	Non-Commercial Stand Area	
FSP Buffers	Rivers, Lakes, Flooded Areas	Water Course Buffer Productive	
River Breaks (Deciduous Only)	Water Course Buffer Non-Productive		
Private Land Reduction			
<b>Timber Harvesting Landbase</b>			
Harvestable Deciduous			
Harvestable Mixedwood			
Harvestable Coniferous			
Harvestable Deciduous with Coniferous Understory			
<b>Land Tenure Status</b>			
Non-J Area	Aboriginal Reserves		
<b>Embedded Non-J Land Classification</b>			
Grazing Leases	Maintain Our Forest Blocks		

### Reference Map



**Timberline**  
Forest Inventory Consultants

1:550,000

Created September 2007

# Alberta-Pacific FMA Area Landbase Summary Table

## FMUs S22



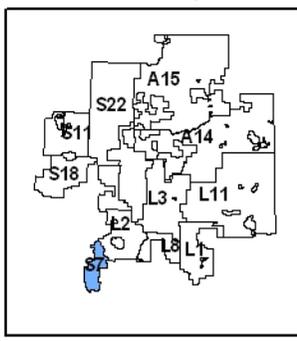
### Forest Management Unit S22

Netdown Category	FMA Area(ha)	Non-FMA Area(ha)	Total Area(ha)	Landbase (%)
<b>Prohibits/Precludes Timber Harvesting</b>				
Provincial Park	0.0	0.0	0.0	0.0%
Aboriginal Reserve	0.0	0.0	0.0	0.0%
Ecological Reserve	0.0	0.0	0.0	0.0%
Protected Notations (No Harvesting Permitted)	789.0	0.0	789.0	0.1%
PSP Buffers	35.7	0.0	35.7	0.0%
River Breaks	0.0	0.0	0.0	0.0%
Private Land	2.7	0.0	2.7	0.0%
<i>Sub-total</i>	<b>827.3</b>	<b>0.0</b>	<b>827.3</b>	<b>0.1%</b>
<b>Recently Disturbed Areas</b>				
Fire	18,213.6	1,352.3	19,566.0	2.4%
Oil and Gas	11,689.6	1,158.7	12,848.2	1.6%
<i>Sub-total</i>	<b>29,903.2</b>	<b>2,511.0</b>	<b>32,414.2</b>	<b>4.0%</b>
<b>Inoperable / Isolated Stands</b>				
Slope	0.0	0.0	0.0	0.0%
Isolated Harvestable stands	472.9	95.8	568.7	0.1%
Non-Forested (CC)	39.6	0.0	39.6	0.0%
Non-Forested Natural Disturbance	32,317.7	6,198.5	38,516.2	4.8%
Non-Forested Vegetated	36,223.6	1,866.5	38,090.2	4.7%
Anthropogenic Vegetated	925.9	172.7	1,098.7	0.1%
Anthropogenic Non-Vegetated	506.4	4.9	511.3	0.1%
Naturally Non-Vegetated	19.1	0.0	19.1	0.0%
Non-Commercial TPR	137,376.1	14,501.1	151,877.1	18.9%
Non-Commercial Species	40,678.0	22,263.1	62,941.2	7.8%
Non-Commercial Stand Density	10,596.0	526.4	11,122.4	1.4%
Non-Commercial Site Index	105,099.4	37,190.9	142,290.4	17.7%
Horizontal Stand Adjustment	36.0	51.9	87.9	0.0%
<i>Sub-total</i>	<b>364,290.8</b>	<b>82,871.9</b>	<b>447,162.7</b>	<b>55.6%</b>
<b>Water Course Buffers</b>				
Buffer	18,691.8	1,628.0	20,319.8	2.5%
<i>Sub-total</i>	<b>18,691.8</b>	<b>1,628.0</b>	<b>20,319.8</b>	<b>2.5%</b>
<b>Aquatic Features</b>				
Rivers	1,678.7	6.9	1,685.5	0.2%
Lakes	16,053.2	2,830.7	18,883.9	2.4%
Flooded Areas	3,579.2	71.9	3,651.0	0.5%
<i>Sub-total</i>	<b>21,311.0</b>	<b>2,909.5</b>	<b>24,220.5</b>	<b>3.0%</b>
<b>Timber Harvesting Landbase</b>				
Deciduous	179,930.9	2,730.4	182,661.3	22.7%
Deciduous / Coniferous	12,754.6	839.3	13,593.9	1.7%
Coniferous / Deciduous	10,228.5	686.1	10,914.6	1.4%
Coniferous	67,094.8	4,350.4	71,445.2	8.9%
<i>Sub-total</i>	<b>270,008.8</b>	<b>8,606.1</b>	<b>278,614.9</b>	<b>34.7%</b>
<b>Grand Total</b>	<b>705,032.9</b>	<b>98,526.5</b>	<b>803,559.4</b>	<b>100.0%</b>

# Alberta-Pacific FMU S7 Netdown Classification

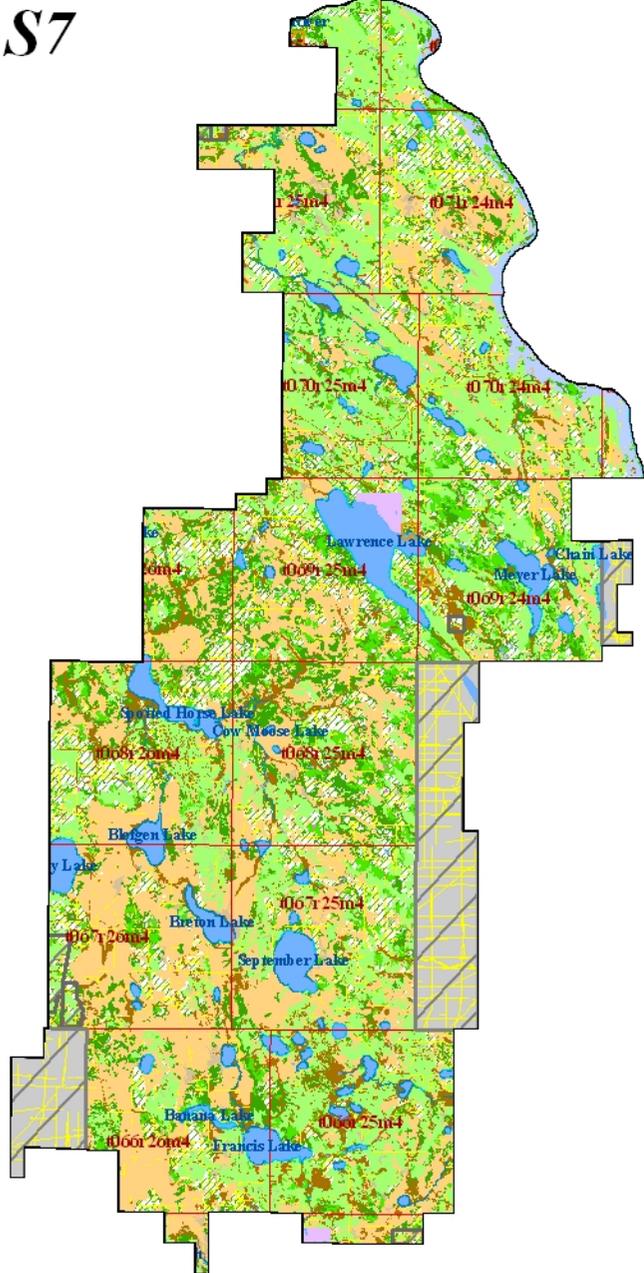
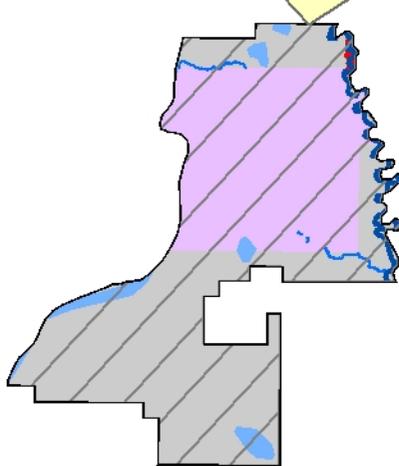
This unit was burnt in the 2001 Chisholm fire and was therefore excluded from the analysis.

Reference Map




  
 1:400,000
   
 Created September 2007

Preliminary analysis of this unit showed only limited and scattered timber and it was therefore excluded from the analysis.



## Legend

<b>Prohibits Timber Harvesting</b> Provincial Park Aboriginal Reserve Ecological Reserve Protective Notations PSP Buffers River Breaks (Deciduous Only) Private Land Reduction	<b>Recently Disturbed Areas</b> Recent Fires Oil and Gas <b>Inoperable / Isolated Stands</b> Slopes > 45% Isolated Stands Non-Forested Pre-91 Outblocks Non-Forested Natural Disturbance Areas Non-Forested Stand Area Non-Commercial Stand Area	<b>Aquatic Features &amp; Water Course Buffers</b> Rivers, Lakes, Flooded Areas Water Course Buffer Productive Water Course Buffer Non-Productive <b>Timber Harvesting Landbase</b> Harvestable Deciduous Harvestable Mixedwood Harvestable Coniferous Harvestable Deciduous with Coniferous Understory
<b>Land Tenure Status</b> Non-J Area Aboriginal Reserves	<b>Embedded II on-J Land Classification</b> Grazing Leases Maintain Our Forest Blocks	

# Alberta-Pacific FMA Area Landbase Summary Table

## FMU S7



### Forest Management Unit S7

Netdown Category	FMA Area(ha)	Non-FMA Area(ha)	Total Area(ha)	Landbase (%)
<b>Prohibits/Precludes Timber Harvesting</b>				
Provincial Park	399.8	0.0	399.8	0.3%
Aboriginal Reserve	0.0	0.0	0.0	0.0%
Ecological Reserve	0.0	0.0	0.0	0.0%
Protected Notations (No Harvesting Permitted)	0.0	1,264.6	1,264.6	1.0%
PSP Buffers	47.6	10.0	57.6	0.0%
River Breaks	1,349.8	0.0	1,349.8	1.1%
Private Land	34.1	187.0	221.1	0.2%
<i>Sub-total</i>	<b>1,831.2</b>	<b>1,461.6</b>	<b>3,292.8</b>	<b>2.7%</b>
<b>Recently Disturbed Areas</b>				
Fire	0.0	0.0	0.0	0.0%
Oil and Gas	3,713.7	406.1	4,119.8	3.4%
<i>Sub-total</i>	<b>3,713.7</b>	<b>406.1</b>	<b>4,119.8</b>	<b>3.4%</b>
<b>Inoperable / Isolated Stands</b>				
Slope	0.0	0.0	0.0	0.0%
Isolated Harvestable stands	53.9	0.2	54.1	0.0%
Non-Forested (CC)	0.0	0.0	0.0	0.0%
Non-Forested Natural Disturbance	1,698.5	3.3	1,701.8	1.4%
Non-Forested Vegetated	7,027.4	696.1	7,723.6	6.3%
Anthropogenic Vegetated	629.8	80.0	709.8	0.6%
Anthropogenic Non-Vegetated	352.3	37.7	389.9	0.3%
Naturally Non-Vegetated	0.6	3.6	4.2	0.0%
Non-Commercial TPR	5,311.5	685.9	5,997.4	4.9%
Non-Commercial Species	13,060.7	693.7	13,754.4	11.3%
Non-Commercial Stand Density	621.2	223.0	844.2	0.7%
Non-Commercial Site Index	9,206.8	233.8	9,440.6	7.7%
Horizontal Stand Adjustment	0.0	514.5	514.5	0.4%
<i>Sub-total</i>	<b>37,962.8</b>	<b>3,171.8</b>	<b>41,134.5</b>	<b>33.7%</b>
<b>Water Course Buffers</b>				
Buffer	3,103.7	238.0	3,341.7	2.7%
<i>Sub-total</i>	<b>3,103.7</b>	<b>238.0</b>	<b>3,341.7</b>	<b>2.7%</b>
<b>Aquatic Features</b>				
Rivers	3.3	0.0	3.3	0.0%
Lakes	5,856.9	165.0	6,021.9	4.9%
Flooded Areas	177.2	17.4	194.6	0.2%
<i>Sub-total</i>	<b>6,037.4</b>	<b>182.4</b>	<b>6,219.8</b>	<b>5.1%</b>
<b>Timber Harvesting Landbase</b>				
Deciduous	41,534.1	2,787.0	44,321.2	36.3%
Deciduous / Coniferous	2,976.3	293.7	3,270.1	2.7%
Coniferous / Deciduous	3,205.0	690.9	3,895.9	3.2%
Coniferous	11,593.8	834.0	12,427.8	0.1%
<i>Sub-total</i>	<b>59,309.3</b>	<b>4,605.7</b>	<b>63,915.0</b>	<b>52.4%</b>
<b>Grand Total</b>	<b>111,958.0</b>	<b>10,065.6</b>	<b>122,023.6</b>	<b>100.0%</b>

# Alberta-Pacific FMU A14

Netdown Classification



ALBERTA-PACIFIC  
FOREST INDUSTRIES INC.



## Legend

### Prohibits Timber Harvesting

- Provincial Park
- Aboriginal Reserve
- Ecological Reserve
- Protective Notations
- PSP Buffers
- River Breaks (Deciduous Only)
- Private Land Reduction

### Recently Disturbed Areas

- Recent Fires
  - Oil and Gas
- ### Inoperable / Isolated Stands
- Slopes > 45%
  - Isolated Stands
  - Non-Forested Pre-91 Cutblocks
  - Disturbance Areas
  - Non-Forested Stand Area
  - Non-Commercial Stand Area

### Aquatic Features & Water Course Buffers

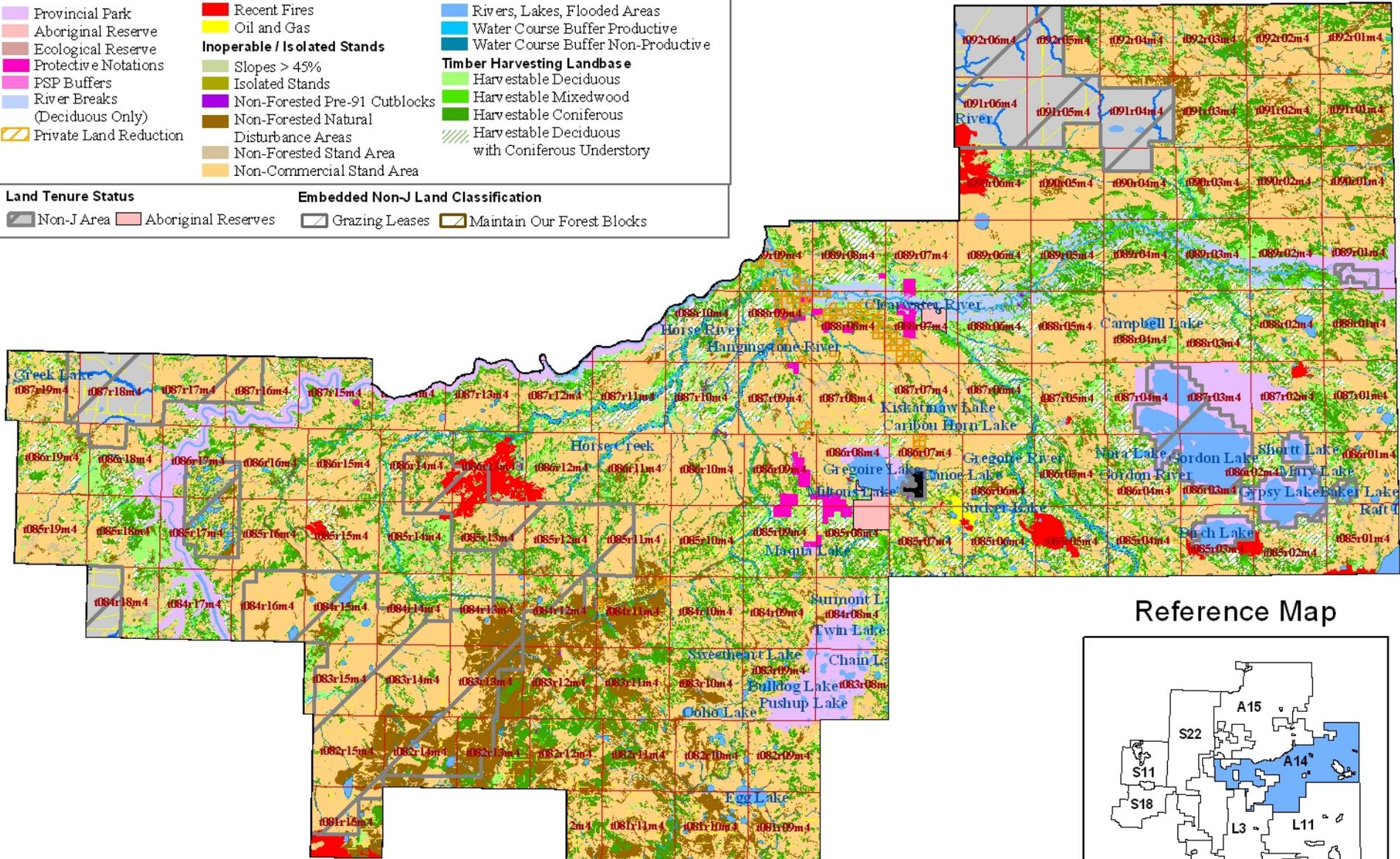
- Rivers, Lakes, Flooded Areas
  - Water Course Buffer Productive
  - Water Course Buffer Non-Productive
- ### Timber Harvesting Landbase
- Harvestable Deciduous
  - Harvestable Mixedwood
  - Harvestable Coniferous
  - Harvestable Deciduous with Coniferous Understory

### Land Tenure Status

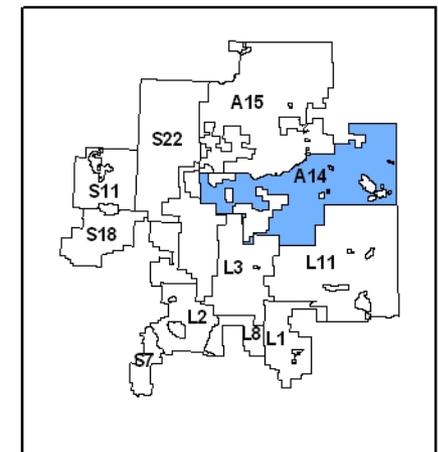
- Non-J Area
- Aboriginal Reserves

### Embedded Non-J Land Classification

- Grazing Leases
- Maintain Our Forest Blocks



## Reference Map



1:750,000

Created September 2007



# Alberta-Pacific FMA Area Landbase Summary Table

## FMU A14



### Forest Management Unit A14

Netdown Category	FMA Area(ha)	*Non-FMA Area(ha)	Total Area(ha)	Landbase (%)
<b>Prohibits/Precludes Timber Harvesting</b>				
Provincial Park	43,665.7	10,116.1	53,781.8	4.6%
Aboriginal Reserve	64.5	1,156.7	1,221.2	0.1%
Ecological Reserve	0.0	9.0	9.0	0.0%
Protected Notations (No Harvesting Permitted)	5,264.4	54.4	5,318.8	0.5%
PSP Buffers	44.9	0.0	44.9	0.0%
River Breaks	14,987.0	1.7	14,988.7	1.3%
Private Land	1,697.6	7.3	1,704.8	0.1%
<i>Sub-total</i>	<b>65,724.1</b>	<b>11,345.2</b>	<b>77,069.3</b>	<b>6.6%</b>
<b>Recently Disturbed Areas</b>				
Fire	11,870.9	2,653.1	14,524.1	1.2%
Oil and Gas	9,842.4	1,455.3	11,297.7	1.0%
<i>Sub-total</i>	<b>21,713.4</b>	<b>4,108.4</b>	<b>25,821.8</b>	<b>2.2%</b>
<b>Inoperable / Isolated Stands</b>				
Slope	3.7	1.1	4.8	0.0%
Isolated Harvestable stands	433.8	91.2	525.0	0.0%
Non-Forested (CC)	403.0	0.0	403.0	0.0%
Non-Forested Natural Disturbance	64,252.9	21,853.5	86,106.4	7.4%
Non-Forested Vegetated	19,794.5	40,861.5	60,656.0	5.2%
Anthropogenic Vegetated	1,982.8	372.2	2,355.0	0.2%
Anthropogenic Non-Vegetated	2,518.8	115.7	2,634.5	0.2%
Naturally Non-Vegetated	198.7	0.0	198.7	0.0%
Non-Commercial TPR	95,624.8	34,623.6	130,248.3	11.1%
Non-Commercial Species	102,812.0	21,054.7	123,866.7	10.6%
Non-Commercial Stand Density	14,091.1	527.6	14,618.8	1.3%
Non-Commercial Site Index	231,482.2	36,455.4	267,937.6	22.9%
Horizontal Stand Adjustment	413.6	22.4	436.0	0.0%
<i>Sub-total</i>	<b>534,012.0</b>	<b>155,978.8</b>	<b>689,990.8</b>	<b>59.1%</b>
<b>Water Course Buffers</b>				
Buffer	18,875.8	3,588.3	22,464.0	1.9%
<i>Sub-total</i>	<b>18,875.8</b>	<b>3,588.3</b>	<b>22,464.0</b>	<b>1.9%</b>
<b>Aquatic Features</b>				
Rivers	7,218.4	87.0	7,305.4	0.6%
Lakes	10,440.0	20,907.9	31,347.8	2.7%
Flooded Areas	3,345.0	184.2	3,529.2	0.3%
<i>Sub-total</i>	<b>21,003.4</b>	<b>21,179.0</b>	<b>42,182.4</b>	<b>3.6%</b>
<b>Timber Harvesting Landbase</b>				
Deciduous	123,484.0	3,424.9	126,908.9	10.9%
Deciduous / Coniferous	15,904.4	731.7	16,636.1	1.4%
Coniferous / Deciduous	14,085.6	998.0	15,083.6	1.3%
Coniferous	139,568.6	12,553.5	152,122.2	13.0%
<i>Sub-total</i>	<b>293,042.6</b>	<b>17,708.1</b>	<b>310,750.7</b>	<b>26.6%</b>
<b>Grand Total</b>	<b>954,371.4</b>	<b>213,907.7</b>	<b>1,168,279.1</b>	<b>100.0%</b>

\* Non FMA Area consists of a combination of Phase 3 and AVI data.



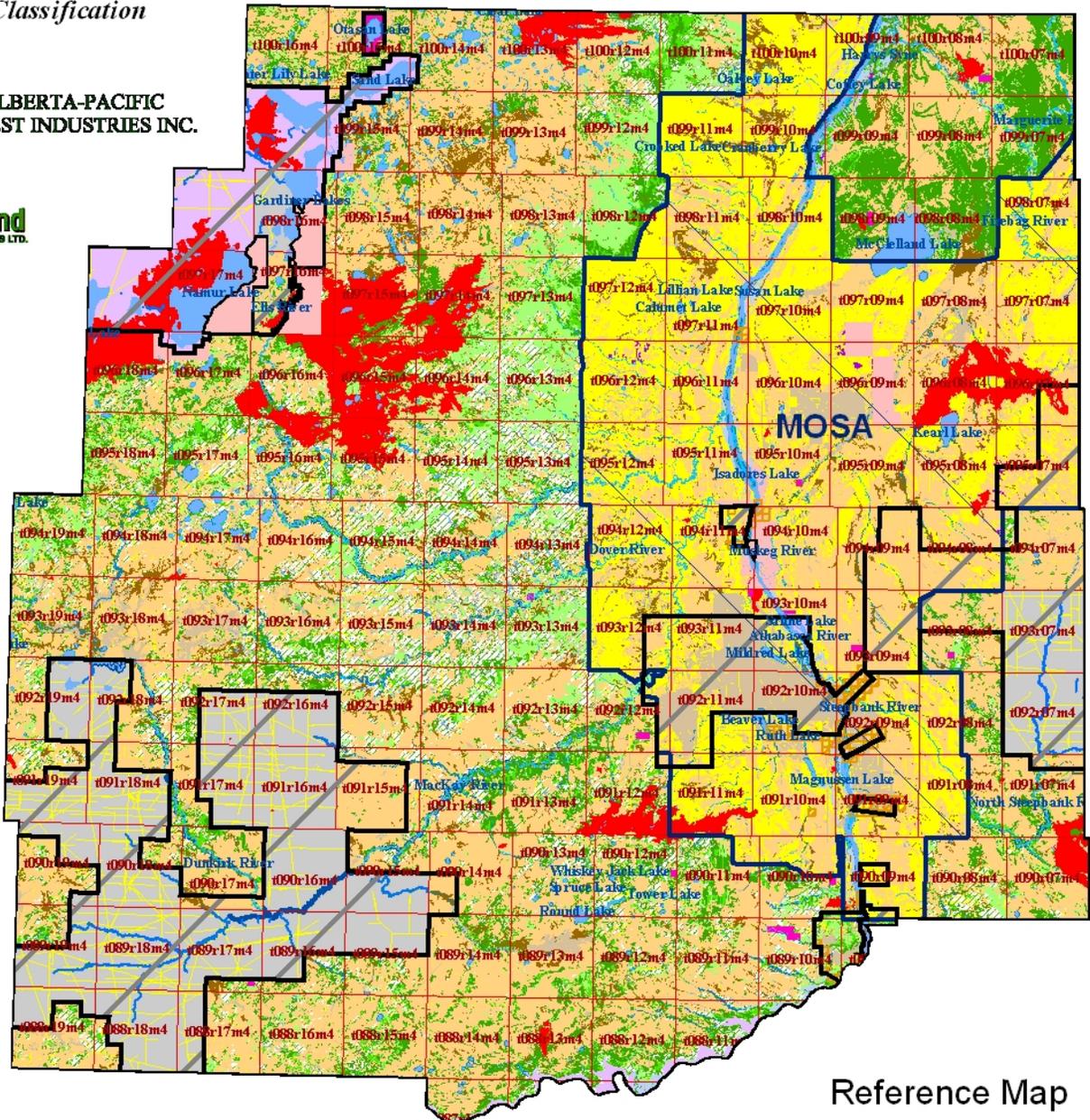
ALBERTA-PACIFIC  
FOREST INDUSTRIES INC.

# Alberta-Pacific FMU A15

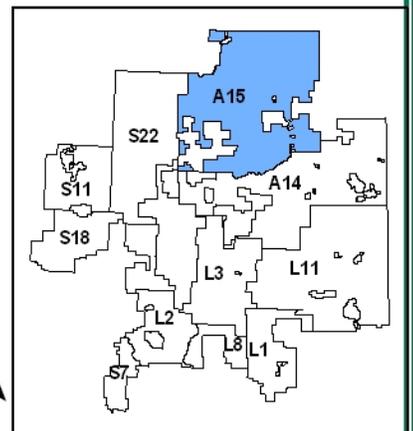
Netdown Classification



ALBERTA-PACIFIC  
FOREST INDUSTRIES INC.



Reference Map



## Legend

Prohibits Timber Harvesting	Recently Disturbed Areas	Aquatic Features & Water Course Buffers
Provincial Park	Recent Fires	Rivers, Lakes, Flooded Areas
Aboriginal Reserve	Oil and Gas	Water Course Buffer Productive
Ecological Reserve	<b>Inoperable / Isolated Stands</b>	Water Course Buffer Non-Productive
Protective Notations	Slopes > 45%	<b>Timber Harvesting Landbase</b>
PSP Buffers	Isolated Stands	Harvestable Deciduous
River Breaks (Deciduous Only)	Non-Forested Pre-91 Cutblocks	Harvestable Mixedwood
Private Land Reduction	Non-Forested Natural Disturbance Areas	Harvestable Coniferous
	Non-Forested Stand Area	Harvestable Deciduous with Coniferous Understory
	Non-Commercial Stand Area	
<b>Land Tenure Status</b>	<b>Embedded Non-J Land Classification</b>	
Non-J Area	Aboriginal Reserves	Grazing Leases
	Maintain Our Forest Blocks	

1:800,000



Created October 2007

# Alberta-Pacific FMA Area Landbase Summary Table

## FMU A15



Netdown Category	Forest Management Units A4, A5, A7 & A8		Total Area(ha)	Landbase (%)
	FMA Area(ha)	Phase 3 Non-FMA Area(ha)		
<b>Prohibits/Precludes Timber Harvesting</b>				
Provincial Park	4,070.2	24,034.1	28,104.3	2.0%
Aboriginal Reserve	11,252.6	1,094.1	12,346.7	0.9%
Ecological Reserve	0.0	0.0	0.0	0.0%
Protected Notations (No Harvesting Permitted)	1,369.4	605.2	1,974.6	0.1%
PSP Buffers	56.2	0.0	56.2	0.0%
River Breaks	6,366.1	376.0	6,742.1	0.5%
Private Land	1,182.0	1,331.3	2,513.3	0.2%
<i>Sub-total</i>	<b>24,296.5</b>	<b>27,440.6</b>	<b>51,737.1</b>	<b>3.6%</b>
<b>Recently Disturbed Areas</b>				
Fire	50,842.8	894.1	51,736.9	3.6%
Oil and Gas	12,498.4	1,582.1	14,080.5	1.0%
<i>Sub-total</i>	<b>63,341.2</b>	<b>2,476.2</b>	<b>65,817.4</b>	<b>4.6%</b>
<b>Inoperable / Isolated Stands</b>				
Slope	18.8	0.0	18.8	0.0%
Isolated Harvestable stands	783.1	56.5	839.6	0.1%
Non-Forested (CC)	539.3	75.3	614.6	0.0%
Non-Forested Natural Disturbance	54,005.8	6,100.0	60,105.8	4.2%
Non-Forested Vegetated	29,804.7	111,103.6	140,908.4	9.8%
Anthropogenic Vegetated	2,006.3	225.4	2,231.7	0.2%
Anthropogenic Non-Vegetated	11,337.4	14,972.6	26,310.0	1.8%
Naturally Non-Vegetated	362.2	27.1	389.3	0.0%
Non-Commercial TPR	100,884.9	13,010.6	113,895.5	7.9%
Non-Commercial Species	131,625.0	18,946.2	150,571.2	10.5%
Non-Commercial Stand Density	17,913.1	1,096.5	19,009.6	1.3%
Non-Commercial Site Index	218,265.8	40,992.5	259,258.4	18.0%
Horizontal Stand Adjustment	225.2	9.8	235.0	0.0%
<i>Sub-total</i>	<b>567,771.7</b>	<b>206,616.0</b>	<b>774,387.8</b>	<b>53.8%</b>
<b>Water Course Buffers</b>				
Buffer	24,331.0	3,279.9	27,610.9	1.9%
<i>Sub-total</i>	<b>24,331.0</b>	<b>3,279.9</b>	<b>27,610.9</b>	<b>1.9%</b>
<b>Aquatic Features</b>				
Rivers	7,095.0	902.1	7,997.0	0.6%
Lakes	12,315.8	13,566.7	25,882.5	1.8%
Flooded Areas	7,260.7	166.1	7,426.8	0.5%
<i>Sub-total</i>	<b>26,671.4</b>	<b>14,634.9</b>	<b>41,306.3</b>	<b>2.9%</b>
<b>Oil Sands - Future Project Deletions: Impact on Timber Harvesting Landbase<sup>1</sup></b>				
Deciduous	81,628.8	5,752.2	87,381.0	3.6%
Deciduous / Coniferous	7,861.8	636.3	8,498.1	0.7%
Coniferous / Deciduous	7,569.9	663.3	8,233.2	0.7%
Coniferous	54,216.1	4,462.0	58,678.2	4.7%
<i>Sub-total</i>	<b>151,276.7</b>	<b>11,513.8</b>	<b>162,790.4</b>	<b>0.1</b>
<b>Timber Harvesting Landbase</b>				
Deciduous	155,476.3	5,469.9	160,946.3	11.2%
Deciduous / Coniferous	15,148.9	2,670.4	17,819.3	1.2%
Coniferous / Deciduous	13,811.4	2,945.5	16,756.9	1.2%
Coniferous	111,900.5	7,877.3	119,777.8	8.3%
<i>Sub-total</i>	<b>296,337.2</b>	<b>18,963.1</b>	<b>315,300.3</b>	<b>21.9%</b>
<b>Grand Total</b>	<b>1,154,025.7</b>	<b>284,924.6</b>	<b>1,438,950.3</b>	<b>100.0%</b>

<sup>1</sup>: Harvestable landbase within the oil sands future deletion areas will be available for harvesting up to a specified date after which these areas are removed from the landbase.

# Alberta-Pacific FMU L11

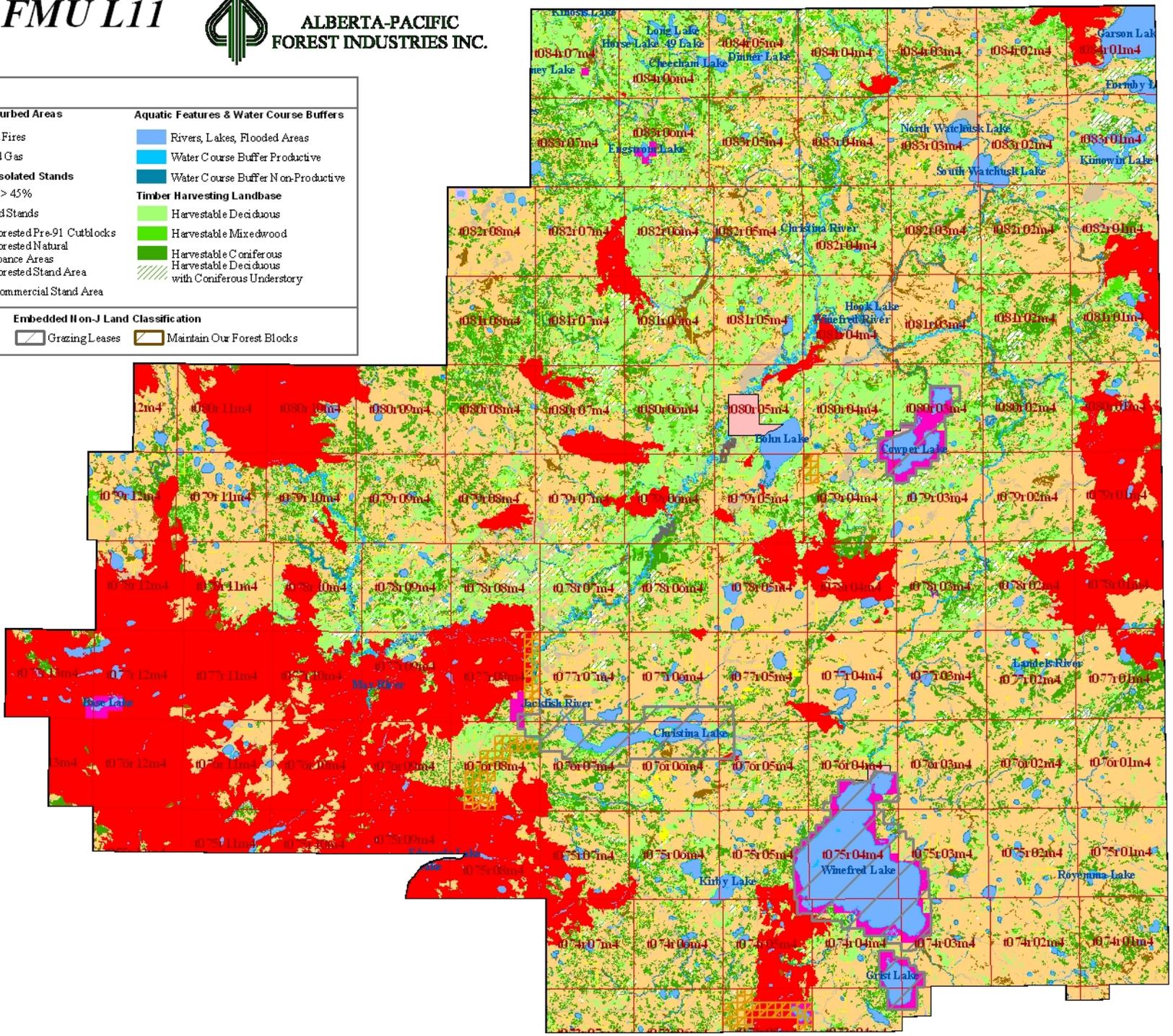
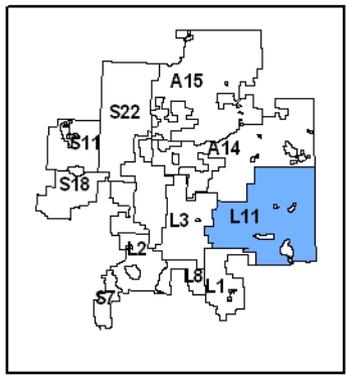
## Netdown Classification



ALBERTA-PACIFIC  
FOREST INDUSTRIES INC.

Legend		
<b>Prohibits Timber Harvesting</b>	<b>Recently Disturbed Areas</b>	<b>Aquatic Features &amp; Water Course Buffers</b>
<ul style="list-style-type: none"> <li>Provincial Park</li> <li>Aboriginal Reserve</li> <li>Ecological Reserve</li> <li>Protective Notations</li> <li>FSP Buffers</li> <li>River Breaks</li> <li>(Deciduous Only)</li> <li>Private Land Reduction</li> </ul>	<ul style="list-style-type: none"> <li>Recent Fires</li> <li>Oil and Gas</li> <li><b>Inoperable / Isolated Stands</b></li> <li>Slopes &gt; 45%</li> <li>Isolated Stands</li> <li>Non-Forsted Pre-91 Cutblocks</li> <li>Non-Forsted Natural Disturbance Areas</li> <li>Non-Forsted Stand Area</li> <li>Non-C Commercial Stand Area</li> </ul>	<ul style="list-style-type: none"> <li>Rivers, Lakes, Flooded Areas</li> <li>Water Course Buffer Productive</li> <li>Water Course Buffer Non-Productive</li> <li><b>Timber Harvesting Landbase</b></li> <li>Harvestable Deciduous</li> <li>Harvestable Mixedwood</li> <li>Harvestable Coniferous</li> <li>Harvestable Deciduous with Coniferous Understory</li> </ul>
<b>Land Tenure Status</b>	<b>Embedded Non-J Land Classification</b>	
<ul style="list-style-type: none"> <li>Non-J Area</li> <li>Aboriginal Reserves</li> </ul>	<ul style="list-style-type: none"> <li>Grazing Leases</li> <li>Maintain Our Forest Blocks</li> </ul>	

### Reference Map



# Alberta-Pacific FMA Area Landbase Summary Table

## FMU L11



### Forest Management Unit L11

Netdown Category	FMA Area(ha)	Non-FMA Area(ha)	Total Area(ha)	Landbase (%)
<b>Prohibits/Precludes Timber Harvesting</b>				
Provincial Park	165.0	0.0	165.0	0.0%
Aboriginal Reserve	0.0	1,946.8	1,946.8	0.2%
Ecological Reserve	0.0	0.0	0.0	0.0%
Protected Notations (No Harvesting Permitted)	1,684.1	6,950.6	8,634.7	0.8%
PSP Buffers	169.8	0.0	169.8	0.0%
River Breaks	0.0	0.0	0.0	0.0%
Private Land	610.0	0.0	610.0	0.1%
<i>Sub-total</i>	<b>2,628.9</b>	<b>8,897.4</b>	<b>11,526.3</b>	<b>1.1%</b>
<b>Recently Disturbed Areas</b>				
Fire	202,659.8	182.7	202,842.6	19.4%
Oil and Gas	18,539.5	225.7	18,765.2	1.8%
<i>Sub-total</i>	<b>221,199.3</b>	<b>408.5</b>	<b>221,607.8</b>	<b>21.2%</b>
<b>Inoperable / Isolated Stands</b>				
Slope	0.0	0.0	0.0	0.0%
Isolated Harvestable stands	523.8	8.2	532.0	0.1%
Non-Forested (CC)	34.3	0.0	34.3	0.0%
Non-Forested Natural Disturbance	23,334.3	335.3	23,669.5	2.3%
Non-Forested Vegetated	27,982.4	408.9	28,391.3	2.7%
Anthropogenic Vegetated	2,951.7	99.6	3,051.2	0.3%
Anthropogenic Non-Vegetated	2,314.9	158.1	2,473.0	0.2%
Naturally Non-Vegetated	12.2	0.0	12.2	0.0%
Non-Commercial TPR	95,081.7	726.3	95,808.0	9.1%
Non-Commercial Species	107,433.0	1,953.1	109,386.1	10.4%
Non-Commercial Stand Density	13,055.9	147.1	13,202.9	1.3%
Non-Commercial Site Index	179,666.2	2,672.2	182,338.4	17.4%
Horizontal Stand Adjustment	62.9	3.5	66.4	0.0%
<i>Sub-total</i>	<b>452,453.3</b>	<b>6,512.2</b>	<b>458,965.5</b>	<b>43.8%</b>
<b>Water Course Buffers</b>				
Buffer	22,417.1	1,879.5	24,296.6	2.3%
<i>Sub-total</i>	<b>22,417.1</b>	<b>1,879.5</b>	<b>24,296.6</b>	<b>2.3%</b>
<b>Aquatic Features</b>				
Rivers	1,820.5	30.8	1,851.4	0.2%
Lakes	23,113.0	17,877.7	40,990.7	3.9%
Flooded Areas	2,665.1	52.2	2,717.3	0.3%
<i>Sub-total</i>	<b>27,598.6</b>	<b>17,960.7</b>	<b>45,559.4</b>	<b>4.3%</b>
<b>Timber Harvesting Landbase</b>				
Deciduous	149,055.1	2,290.5	151,345.6	14.4%
Deciduous / Coniferous	11,266.3	166.2	11,432.5	1.1%
Coniferous / Deciduous	8,893.5	172.2	9,065.7	0.9%
Coniferous	112,074.0	1,811.7	113,885.7	10.9%
<i>Sub-total</i>	<b>281,288.9</b>	<b>4,440.6</b>	<b>285,729.5</b>	<b>27.3%</b>
<b>Grand Total</b>	<b>1,007,586.1</b>	<b>40,098.9</b>	<b>1,047,685.0</b>	<b>100.0%</b>

# Alberta-Pacific FMU L1

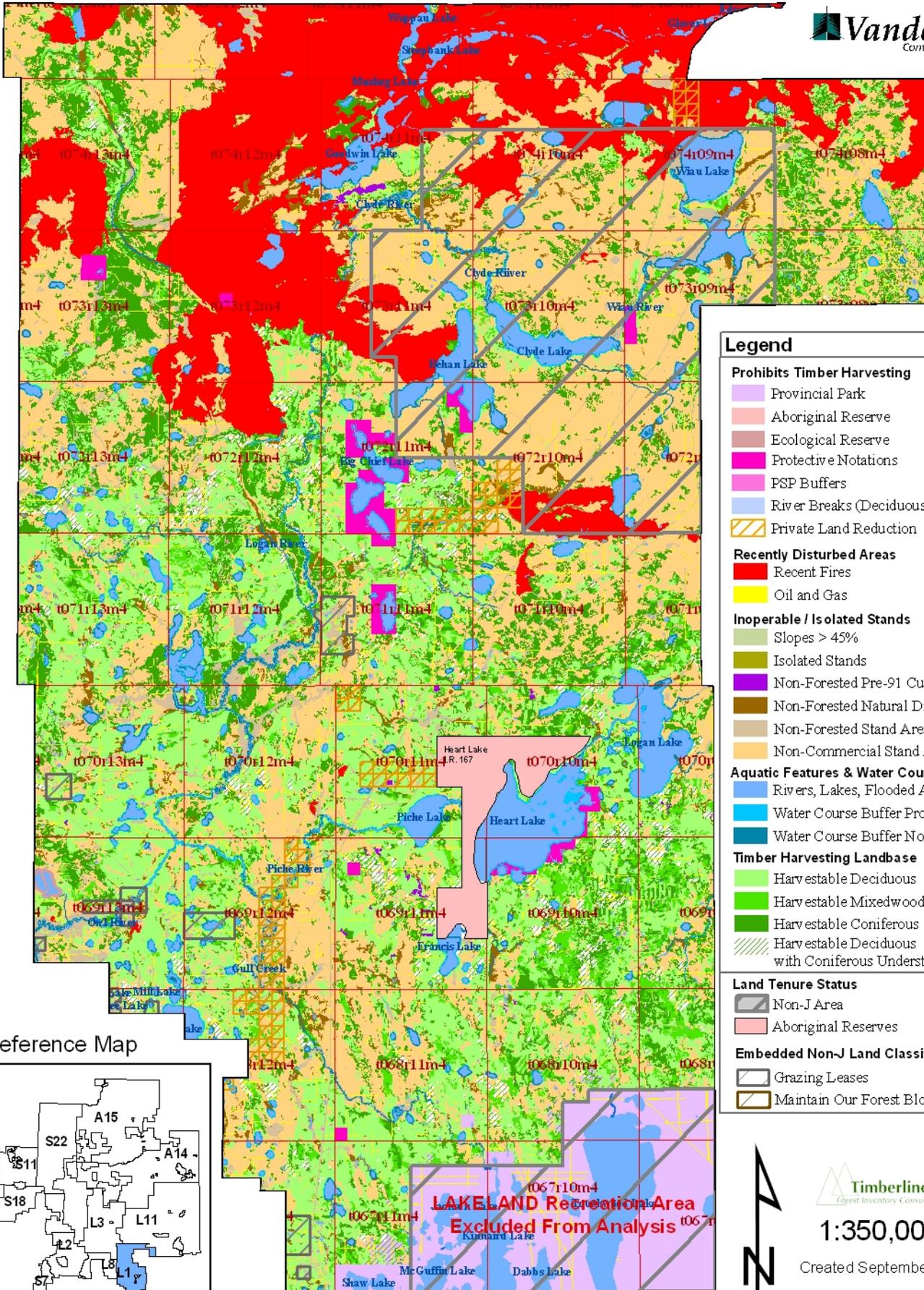
## Netdown Classification



ALBERTA-PACIFIC  
FOREST INDUSTRIES INC.



**Vanderwell**  
Contractors (1971) Ltd.



### Legend

#### Prohibits Timber Harvesting

- Provincial Park
- Aboriginal Reserve
- Ecological Reserve
- Protective Notations
- PSP Buffers
- River Breaks (Deciduous Only)
- Private Land Reduction

#### Recently Disturbed Areas

- Recent Fires
- Oil and Gas

#### Inoperable / Isolated Stands

- Slopes > 45%
- Isolated Stands
- Non-Forested Pre-91 Cutblocks
- Non-Forested Natural Disturbance Areas
- Non-Forested Stand Area
- Non-Commercial Stand Area

#### Aquatic Features & Water Course Buffers

- Rivers, Lakes, Flooded Areas
- Water Course Buffer Productive
- Water Course Buffer Non-Productive

#### Timber Harvesting Landbase

- Harvestable Deciduous
- Harvestable Mixedwood
- Harvestable Coniferous
- Harvestable Deciduous with Coniferous Understory

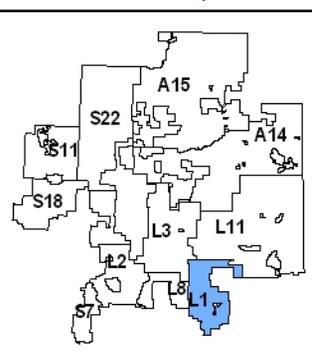
#### Land Tenure Status

- Non-J Area
- Aboriginal Reserves

#### Embedded Non-J Land Classification

- Grazing Leases
- Maintain Our Forest Blocks

### Reference Map



**LAKE LAND Recreation Area**  
Excluded From Analysis



**Timberline**  
Forest Inventory Consultants

1:350,000

Created September 2007

# Alberta-Pacific FMA Area Landbase Summary Table

## FMU L1



### Forest Management Unit L1

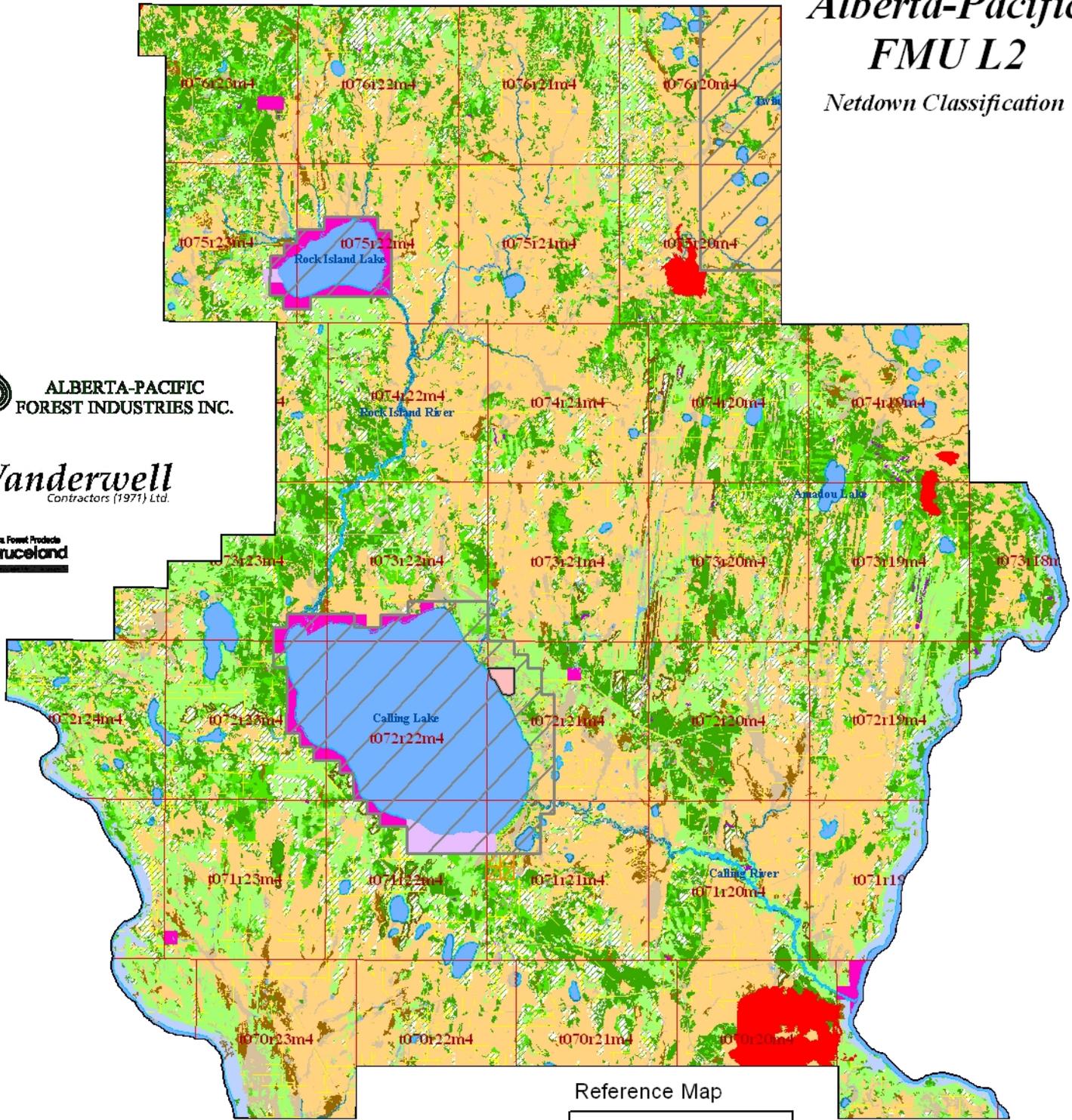
Netdown Category	FMA Area(ha)	Non-FMA Area(ha)	Total Area(ha)	Landbase (%)
<b>Prohibits/Precludes Timber Harvesting</b>				
Provincial Park	1,103.7	0.0	1,103.7	0.3%
Aboriginal Reserve	0.0	0.0	0.0	0.0%
Ecological Reserve	145.9	0.0	145.9	0.0%
Protected Notations (No Harvesting Permitted)	2,495.8	379.8	2,875.5	0.9%
PSP Buffers	89.7	0.0	89.7	0.0%
River Breaks	0.0	0.0	0.0	0.0%
Private Land	518.3	0.0	518.3	0.2%
<i>Sub-total</i>	<b>4,353.5</b>	<b>379.8</b>	<b>4,733.2</b>	<b>1.4%</b>
<b>Recently Disturbed Areas</b>				
Fire	45,425.7	5,654.6	51,080.3	15.3%
Oil and Gas	6,217.8	937.2	7,155.0	2.1%
<i>Sub-total</i>	<b>51,643.5</b>	<b>6,591.9</b>	<b>58,235.3</b>	<b>17.4%</b>
<b>Inoperable / Isolated Stands</b>				
Slope	0.4	0.0	0.4	0.0%
Isolated Harvestable stands	125.2	18.8	144.0	0.0%
Non-Forested (CC)	322.0	0.0	322.0	0.1%
Non-Forested Natural Disturbance	5,367.7	1,545.4	6,913.0	2.1%
Non-Forested Vegetated	7,351.8	1,241.3	8,593.1	2.6%
Anthropogenic Vegetated	1,735.1	468.5	2,203.6	0.7%
Anthropogenic Non-Vegetated	1,239.2	223.4	1,462.6	0.4%
Naturally Non-Vegetated	0.5	0.0	0.5	0.0%
Non-Commercial TPR	14,649.8	7,798.8	22,448.7	6.7%
Non-Commercial Species	30,832.4	13,187.3	44,019.7	13.2%
Non-Commercial Stand Density	1,847.4	415.2	2,262.7	0.7%
Non-Commercial Site Index	21,764.8	8,402.0	30,166.8	9.0%
Horizontal Stand Adjustment	3.8	0.0	3.8	0.0%
<i>Sub-total</i>	<b>85,240.1</b>	<b>33,300.7</b>	<b>118,540.8</b>	<b>35.5%</b>
<b>Water Course Buffers</b>				
Buffer	7,844.9	2,200.1	10,045.1	3.0%
<i>Sub-total</i>	<b>7,844.9</b>	<b>2,200.1</b>	<b>10,045.1</b>	<b>3.0%</b>
<b>Aquatic Features</b>				
Rivers	267.6	38.3	305.9	0.1%
Lakes	13,590.5	5,173.5	18,763.9	5.6%
Flooded Areas	742.1	21.2	763.4	0.2%
<i>Sub-total</i>	<b>14,600.2</b>	<b>5,233.0</b>	<b>19,833.2</b>	<b>5.9%</b>
<b>Timber Harvesting Landbase</b>				
Deciduous	67,618.6	2,704.8	70,323.4	21.1%
Deciduous / Coniferous	5,444.3	497.7	5,942.0	1.8%
Coniferous / Deciduous	5,573.1	225.6	5,798.7	1.7%
Coniferous	36,354.6	4,000.6	40,355.2	12.1%
<i>Sub-total</i>	<b>114,990.6</b>	<b>7,428.7</b>	<b>122,419.3</b>	<b>36.7%</b>
<b>Grand Total</b>	<b>278,672.7</b>	<b>55,134.1</b>	<b>333,806.8</b>	<b>100.0%</b>

# Alberta-Pacific FMU L2 Netdown Classification

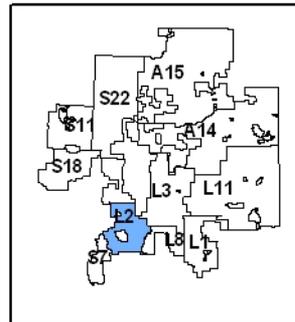


ALBERTA-PACIFIC  
FOREST INDUSTRIES INC.

**Vanderwell**  
Contractors (1971) Ltd.



Reference Map



## Legend

<b>Prohibits Timber Harvesting</b>	<b>Recently Disturbed Areas</b>	<b>Aquatic Features &amp; Water Course Buffers</b>
Provincial Park	Recent Fires	Rivers, Lakes, Flooded Areas
Aboriginal Reserve	Oil and Gas	Water Course Buffer Productive
Ecological Reserve	<b>Inoperable / Isolated Stands</b>	Water Course Buffer Non-Productive
Protective Notations	Slopes > 45%	<b>Timber Harvesting Landbase</b>
PSP Buffers	Isolated Stands	Harvestable Deciduous
River Breaks (Deciduous Only)	Non-For ested Pre-91 Cutblocks	Harvestable Mixedwood
Private Land Reduction	Non-For ested Natural Disturbance Areas	Harvestable Coniferous
	Non-For ested Stand Area	Harvestable Deciduous with Coniferous Understory
	Non-Commercial Stand Area	

### Land Tenure Status

Non-J Area Aboriginal Reserves

### Embedded Non-J Land Classification

Grazing Leases Maintain Our Forest Blocks

Timberline  
Forest Inventory Consultants

1:350,000

Created September 2007

# Alberta-Pacific FMA Area Landbase Summary Table

## FMU L2



### Forest Management Unit L2

Netdown Category	FMA Area(ha)	Non-FMA Area(ha)	Total Area(ha)	Landbase (%)
<b>Prohibits/Precludes Timber Harvesting</b>				
Provincial Park	34.6	800.3	834.9	0.3%
Aboriginal Reserve	0.0	198.4	198.4	0.1%
Ecological Reserve	0.0	0.0	0.0	0.0%
Protected Notations (No Harvesting Permitted)	526.1	2,338.6	2,864.7	1.0%
PSP Buffers	48.3	32.2	80.5	0.0%
River Breaks	3,836.2	24.5	3,860.7	1.3%
Private Land	25.7	0.0	25.7	0.0%
<i>Sub-total</i>	<b>4,471.0</b>	<b>3,393.9</b>	<b>7,864.9</b>	<b>2.6%</b>
<b>Recently Disturbed Areas</b>				
Fire	3,407.6	164.3	3,571.8	1.2%
Oil and Gas	8,065.2	561.6	8,626.7	2.9%
<i>Sub-total</i>	<b>11,472.7</b>	<b>725.8</b>	<b>12,198.6</b>	<b>4.1%</b>
<b>Inoperable / Isolated Stands</b>				
Slope	0.0	0.0	0.0	0.0%
Isolated Harvestable stands	125.9	19.8	145.7	0.0%
Non-Forested (CC)	196.3	76.7	273.0	0.1%
Non-Forested Natural Disturbance	5,316.0	233.3	5,549.2	1.8%
Non-Forested Vegetated	12,554.5	605.7	13,160.1	4.4%
Anthropogenic Vegetated	846.3	159.3	1,005.6	0.3%
Anthropogenic Non-Vegetated	1,145.0	352.8	1,497.8	0.5%
Naturally Non-Vegetated	32.4	6.0	38.4	0.0%
Non-Commercial TPR	16,091.4	575.8	16,667.2	5.5%
Non-Commercial Species	39,825.2	4,550.0	44,375.2	14.8%
Non-Commercial Stand Density	1,182.7	89.4	1,272.1	0.4%
Non-Commercial Site Index	44,949.4	1,898.1	46,847.5	15.6%
Horizontal Stand Adjustment	18.6	0.0	18.6	0.0%
<i>Sub-total</i>	<b>122,283.6</b>	<b>8,566.9</b>	<b>130,850.5</b>	<b>43.5%</b>
<b>Water Course Buffers</b>				
Buffer	3,779.7	784.1	4,563.8	1.5%
<i>Sub-total</i>	<b>3,779.7</b>	<b>784.1</b>	<b>4,563.8</b>	<b>1.5%</b>
<b>Aquatic Features</b>				
Rivers	2,307.8	10.6	2,318.5	0.8%
Lakes	2,842.6	16,130.6	18,973.3	6.3%
Flooded Areas	795.9	27.3	823.2	0.3%
<i>Sub-total</i>	<b>5,946.4</b>	<b>16,168.6</b>	<b>22,115.0</b>	<b>7.4%</b>
<b>Timber Harvesting Landbase</b>				
Deciduous	61,344.4	4,033.7	65,378.0	21.8%
Deciduous / Coniferous	6,462.2	160.9	6,623.0	2.2%
Coniferous / Deciduous	8,457.1	309.7	8,766.8	2.9%
Coniferous	35,527.9	6,659.9	42,187.8	14.0%
<i>Sub-total</i>	<b>111,791.6</b>	<b>11,164.1</b>	<b>122,955.7</b>	<b>40.9%</b>
<b>Grand Total</b>	<b>259,745.0</b>	<b>40,803.4</b>	<b>300,548.4</b>	<b>100.0%</b>



# Alberta-Pacific FMA Area Landbase Summary Table

## FMU L3

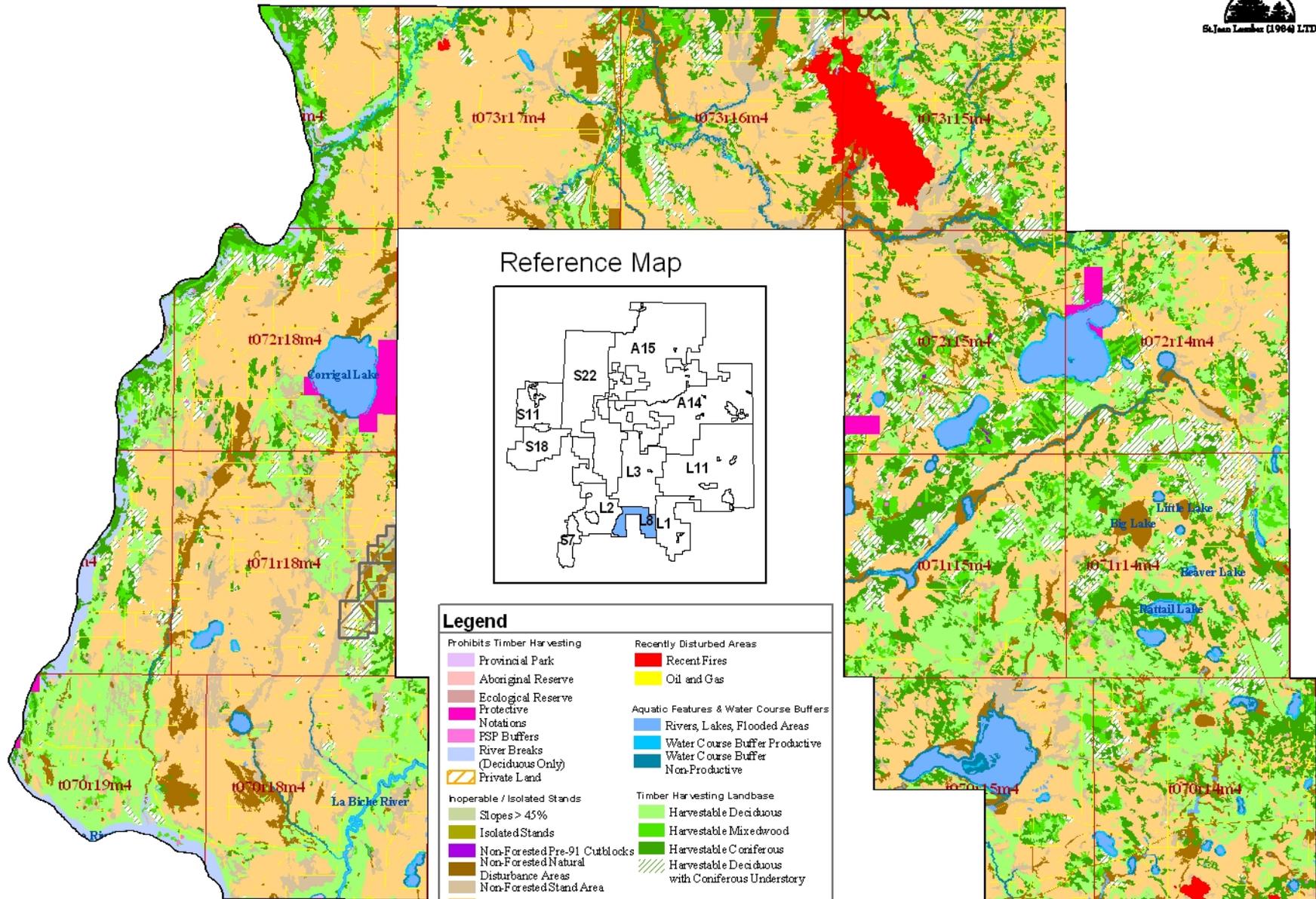


### Forest Management Unit L3

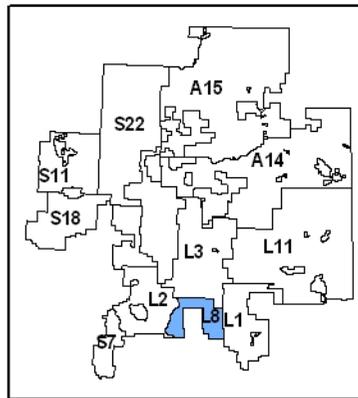
Netdown Category	FMA Area(ha)	Non-FMA Area(ha)	Total Area(ha)	Landbase (%)
<b>Prohibits/Precludes Timber Harvesting</b>				
Provincial Park	1,279.3	0.0	1,279.3	0.2%
Aboriginal Reserve	0.0	0.0	0.0	0.0%
Ecological Reserve	0.0	0.0	0.0	0.0%
Protected Notations (No Harvesting Permitted)	5,008.8	0.0	5,008.8	0.9%
PSP Buffers	73.4	0.0	73.4	0.0%
River Breaks	9,399.4	31.1	9,430.5	1.6%
Private Land	308.6	0.0	308.6	0.1%
<i>Sub-total</i>	<b>16,069.6</b>	<b>31.1</b>	<b>16,100.7</b>	<b>2.7%</b>
<b>Recently Disturbed Areas</b>				
Fire	102,027.2	2,250.9	104,278.1	17.8%
Oil and Gas	7,590.9	1,681.5	9,272.4	1.6%
<i>Sub-total</i>	<b>109,618.1</b>	<b>3,932.4</b>	<b>113,550.5</b>	<b>19.3%</b>
<b>Inoperable / Isolated Stands</b>				
Slope	0.0	0.0	0.0	0.0%
Isolated Harvestable stands	259.5	74.9	334.3	0.1%
Non-Forested (CC)	106.2	1.2	107.4	0.0%
Non-Forested Natural Disturbance	12,258.1	8,561.6	20,819.7	3.5%
Non-Forested Vegetated	10,108.1	5,507.8	15,616.0	2.7%
Anthropogenic Vegetated	1,795.9	304.8	2,100.7	0.4%
Anthropogenic Non-Vegetated	634.2	7.3	641.5	0.1%
Naturally Non-Vegetated	305.9	0.0	305.9	0.1%
Non-Commercial TPR	39,446.1	31,110.0	70,556.1	12.0%
Non-Commercial Species	28,112.4	24,879.3	52,991.8	9.0%
Non-Commercial Stand Density	2,318.8	221.7	2,540.6	0.4%
Non-Commercial Site Index	83,986.7	44,838.3	128,825.0	21.9%
Horizontal Stand Adjustment	47.3	2.4	49.7	0.0%
<i>Sub-total</i>	<b>179,379.4</b>	<b>115,509.3</b>	<b>294,888.7</b>	<b>50.2%</b>
<b>Water Course Buffers</b>				
Buffer	7,860.6	2,605.2	10,465.8	1.8%
<i>Sub-total</i>	<b>7,860.6</b>	<b>2,605.2</b>	<b>10,465.8</b>	<b>1.8%</b>
<b>Aquatic Features</b>				
Rivers	3,898.4	2.6	3,901.0	0.7%
Lakes	5,353.6	1,725.6	7,079.3	1.2%
Flooded Areas	519.7	69.1	588.8	0.1%
<i>Sub-total</i>	<b>9,771.8</b>	<b>1,797.3</b>	<b>11,569.0</b>	<b>2.0%</b>
<b>Timber Harvesting Landbase</b>				
Deciduous	31,667.8	2,815.8	34,483.5	5.9%
Deciduous / Coniferous	10,397.2	614.8	11,012.0	1.9%
Coniferous / Deciduous	13,470.5	486.3	13,956.9	2.4%
Coniferous	75,147.7	6,220.8	81,368.4	13.9%
<i>Sub-total</i>	<b>130,683.2</b>	<b>10,137.7</b>	<b>140,820.9</b>	<b>24.0%</b>
<b>Grand Total</b>	<b>453,382.7</b>	<b>134,012.9</b>	<b>587,395.6</b>	<b>100.0%</b>

# Alberta-Pacific FMU L8

## Netdown Classification



Reference Map



### Legend

Prohibits Timber Harvesting	Recent Fires
Provincial Park	Oil and Gas
Aboriginal Reserve	
Ecological Reserve	
Protective	
Notations	
PSP Buffers	
River Breaks	
(Deciduous Only)	
Private Land	
	Aquatic Features & Water Course Buffers
	Rivers, Lakes, Flooded Areas
	Water Course Buffer Productive
	Water Course Buffer Non-Productive
Inoperable / Isolated Stands	Timber Harvesting Landbase
Slopes > 45%	Harvestable Deciduous
Isolated Stands	Harvestable Mixedwood
Non-Forest Pre-91 Cutblocks	Harvestable Coniferous
Non-Forest Natural	Harvestable Deciduous with Coniferous Understorey
Disturbance Areas	
Non-Forest Stand Area	
Non-Commercial Stand Area	
Land Tenure Status	Embedded Non-J Land Classification
Non-J Area	Grazing Leases
Aboriginal Reserves	Maintain Our Forest Blocks

# Alberta-Pacific FMA Area Landbase Summary Table

## FMU L8



### Forest Management Unit L8

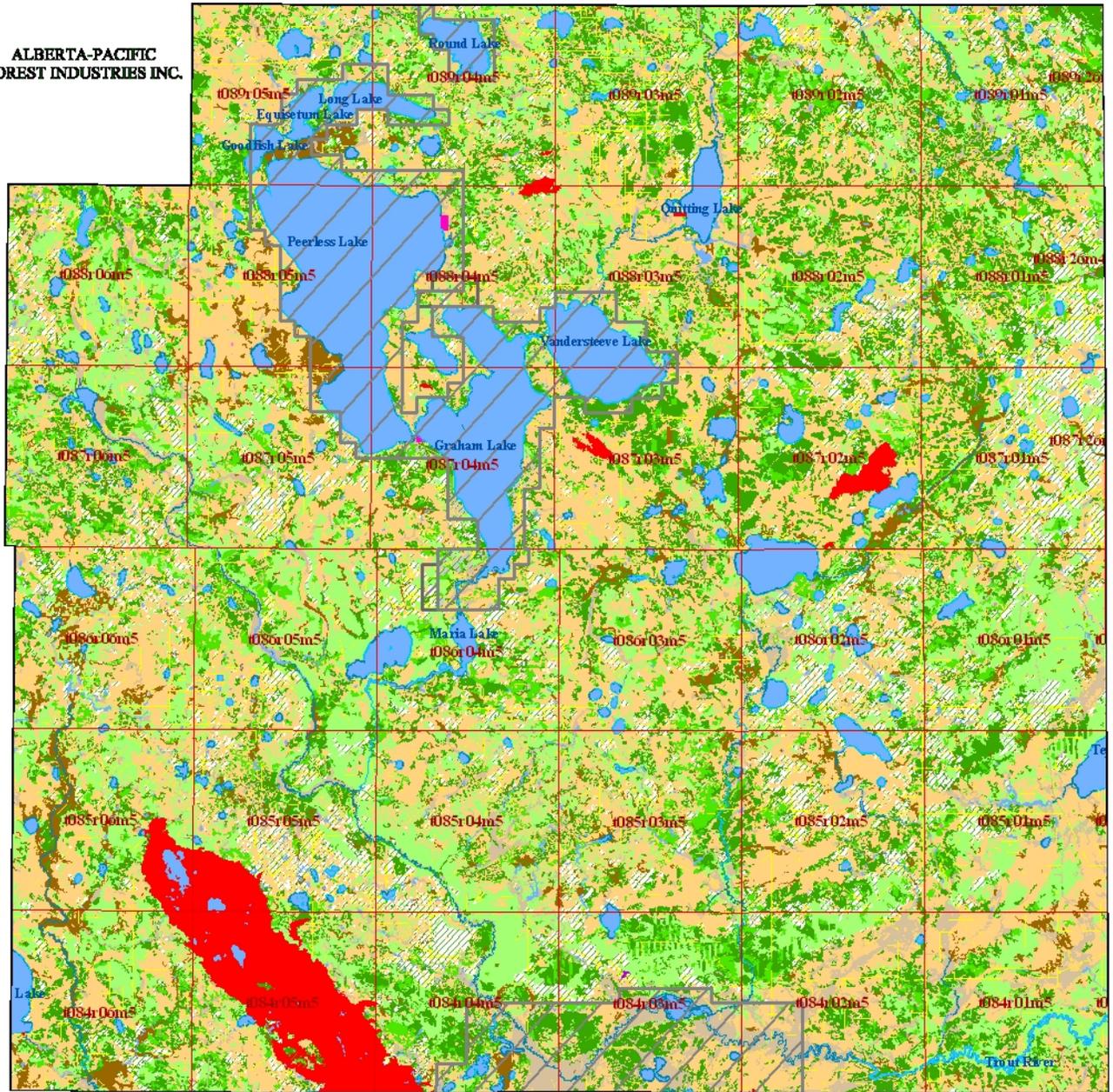
Netdown Category	FMA Area(ha)	Non-FMA Area(ha)	Total Area(ha)	Landbase (%)
<b>Prohibits/Precludes Timber Harvesting</b>				
Provincial Park	7.0	0.0	7.0	0.0%
Aboriginal Reserve	0.0	0.0	0.0	0.0%
Ecological Reserve	0.0	0.0	0.0	0.0%
Protected Notations (No Harvesting Permitted)	763.2	0.0	763.2	0.6%
PSP Buffers	35.7	0.0	35.7	0.0%
River Breaks	1,634.3	0.0	1,634.3	1.3%
Private Land	0.0	0.0	0.0	0.0%
<i>Sub-total</i>	<b>2,440.2</b>	<b>0.0</b>	<b>2,440.2</b>	<b>1.9%</b>
<b>Recently Disturbed Areas</b>				
Fire	1,718.6	0.0	1,718.6	1.4%
Oil and Gas	3,076.5	29.1	3,105.6	2.5%
<i>Sub-total</i>	<b>4,795.0</b>	<b>29.1</b>	<b>4,824.1</b>	<b>3.8%</b>
<b>Inoperable / Isolated Stands</b>				
Slope	0.0	0.0	0.0	0.0%
Isolated Harvestable stands	31.0	1.7	32.8	0.0%
Non-Forested (CC)	17.7	0.0	17.7	0.0%
Non-Forested Natural Disturbance	6,937.4	137.7	7,075.0	5.6%
Non-Forested Vegetated	5,768.9	5.4	5,774.3	4.6%
Anthropogenic Vegetated	455.1	181.5	636.5	0.5%
Anthropogenic Non-Vegetated	574.9	1.7	576.7	0.5%
Naturally Non-Vegetated	3.5	0.0	3.5	0.0%
Non-Commercial TPR	7,531.9	0.0	7,531.9	6.0%
Non-Commercial Species	23,809.3	57.6	23,867.0	18.9%
Non-Commercial Stand Density	1,396.7	5.1	1,401.8	1.1%
Non-Commercial Site Index	20,754.6	32.5	20,787.0	16.5%
Horizontal Stand Adjustment	0.0	0.0	0.0	0.0%
<i>Sub-total</i>	<b>67,281.0</b>	<b>423.3</b>	<b>67,704.3</b>	<b>53.7%</b>
<b>Water Course Buffers</b>				
Buffer	2,885.2	0.0	2,885.2	2.3%
<i>Sub-total</i>	<b>2,885.2</b>	<b>0.0</b>	<b>2,885.2</b>	<b>2.3%</b>
<b>Aquatic Features</b>				
Rivers	48.1	0.0	48.1	0.0%
Lakes	3,292.7	0.0	3,292.7	2.6%
Flooded Areas	143.0	0.6	143.7	0.1%
<i>Sub-total</i>	<b>3,483.8</b>	<b>0.6</b>	<b>3,484.4</b>	<b>2.8%</b>
<b>Timber Harvesting Landbase</b>				
Deciduous	26,009.5	240.3	26,249.8	20.8%
Deciduous / Coniferous	2,040.6	0.0	2,040.6	1.6%
Coniferous / Deciduous	2,465.3	1.1	2,466.5	2.0%
Coniferous	14,028.9	15.7	14,044.6	11.1%
<i>Sub-total</i>	<b>44,544.4</b>	<b>257.1</b>	<b>44,801.6</b>	<b>35.5%</b>
<b>Grand Total</b>	<b>125,429.7</b>	<b>710.1</b>	<b>126,139.8</b>	<b>100.0%</b>

# Alberta-Pacific FMU S11

## Netdown Classification



ALBERTA-PACIFIC  
FOREST INDUSTRIES INC.



### Legend

#### Prohibits Timber Harvesting

- Provincial Park
- Aboriginal Reserve
- Ecological Reserve
- Protective Notations
- FSP Buffers
- River Breaks (Deciduous Only)
- Private Land and Reduction

#### Recently Disturbed Areas

- Recent Fires
- Oil and Gas
- Inoperable / Isolated Stands**
- Slopes > 45%
- Isolated Stands
- Non-Forested Pre-91 Cutblocks
- Non-Forested Natural Disturbance Areas
- Non-Forested Stand Area
- Non-Commercial Stand Area

#### Aquatic Features & Water Course Buffers

- Rivers, Lakes, Flooded Areas
- Water Course Buffer Productive
- Water Course Buffer Non-Productive

#### Timber Harvesting Landbase

- Harvestable Deciduous
- Harvestable Mixedwood
- Harvestable Coniferous
- Harvestable Deciduous with Coniferous Understory

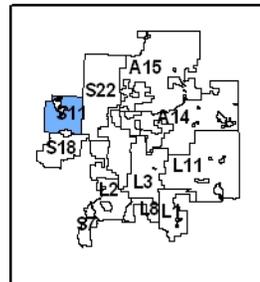
#### Land Tenure Status

- Non-J Area
- Aboriginal Reserves

#### Embedded II on-J Land Classification

- Grazing Leases
- Maintain Our Forest Blocks

### Reference Map



**Timberline**  
Forest Inventory Consultants

1:350,000

Created September 2007

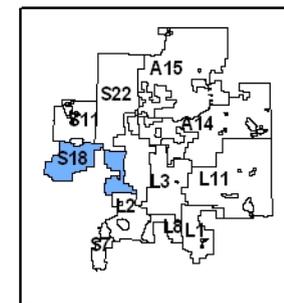
# Alberta-Pacific FMA Area Landbase Summary Table

## FMU S11

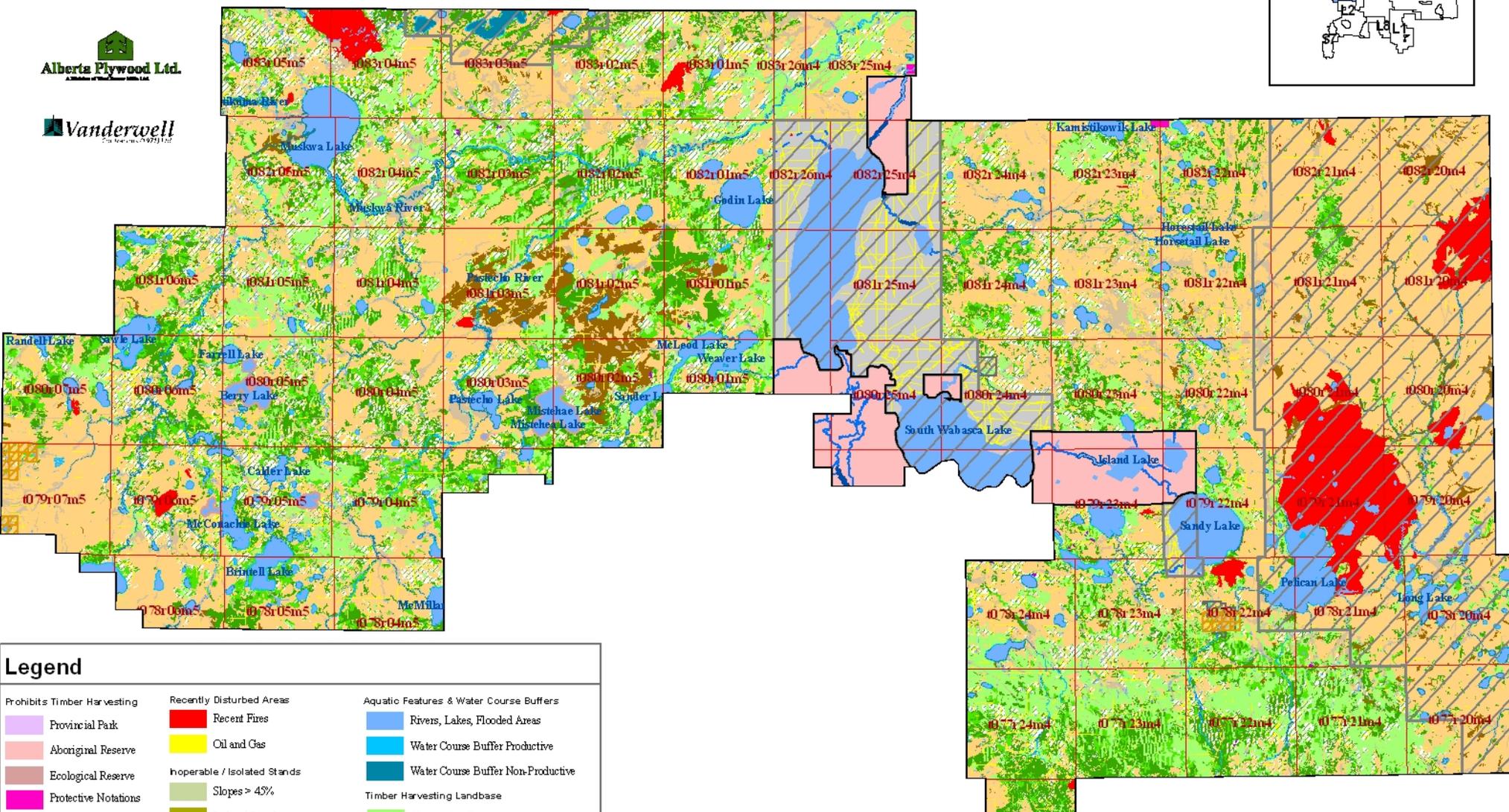


### Forest Management Unit S11

Netdown Category	FMA Area(ha)	Non-FMA Area(ha)	Total Area(ha)	Landbase (%)
<b>Prohibits/Precludes Timber Harvesting</b>				
Provincial Park	0.0	0.0	0.0	0.0%
Aboriginal Reserve	0.0	0.0	0.0	0.0%
Ecological Reserve	0.0	0.0	0.0	0.0%
Protected Notations (No Harvesting Permitted)	0.0	40.1	40.1	0.0%
PSP Buffers	51.4	2.2	53.6	0.0%
River Breaks	0.0	0.0	0.0	0.0%
Private Land	0.0	0.0	0.0	0.0%
<i>Sub-total</i>	<i>51.4</i>	<i>42.3</i>	<i>93.8</i>	<i>0.0%</i>
<b>Recently Disturbed Areas</b>				
Fire	8,094.0	16.3	8,110.2	2.4%
Oil and Gas	8,147.2	330.7	8,477.8	2.5%
<i>Sub-total</i>	<i>16,241.1</i>	<i>346.9</i>	<i>16,588.1</i>	<i>5.0%</i>
<b>Inoperable / Isolated Stands</b>				
Slope	0.0	0.0	0.0	0.0%
Isolated Harvestable stands	137.2	25.8	163.0	0.0%
Non-Forested (CC)	12.3	0.0	12.3	0.0%
Non-Forested Natural Disturbance	9,628.5	744.2	10,372.7	3.1%
Non-Forested Vegetated	11,623.8	2,931.7	14,555.5	4.4%
Anthropogenic Vegetated	286.3	12.7	299.0	0.1%
Anthropogenic Non-Vegetated	638.0	207.8	845.9	0.3%
Naturally Non-Vegetated	0.0	0.0	0.0	0.0%
Non-Commercial TPR	6,767.5	309.4	7,076.9	2.1%
Non-Commercial Species	20,405.8	1,489.2	21,895.0	6.6%
Non-Commercial Stand Density	7,435.7	805.0	8,240.7	2.5%
Non-Commercial Site Index	60,913.8	3,308.9	64,222.7	19.3%
Horizontal Stand Adjustment	2.6	3.6	6.2	0.0%
<i>Sub-total</i>	<i>117,851.5</i>	<i>9,838.5</i>	<i>127,690.1</i>	<i>38.4%</i>
<b>Water Course Buffers</b>				
Buffer	7,157.6	2,401.8	9,559.4	2.9%
<i>Sub-total</i>	<i>7,157.6</i>	<i>2,401.8</i>	<i>9,559.4</i>	<i>2.9%</i>
<b>Aquatic Features</b>				
Rivers	137.6	15.6	153.2	0.0%
Lakes	8,889.6	16,364.9	25,254.5	7.6%
Flooded Areas	1,699.0	8.1	1,707.1	0.5%
<i>Sub-total</i>	<i>10,726.3</i>	<i>16,388.6</i>	<i>27,114.9</i>	<i>8.2%</i>
<b>Timber Harvesting Landbase</b>				
Deciduous	80,117.7	2,827.1	82,944.8	24.9%
Deciduous / Coniferous	9,289.0	410.6	9,699.5	2.9%
Coniferous / Deciduous	8,066.7	409.8	8,476.6	2.5%
Coniferous	46,834.0	3,552.0	50,385.9	15.2%
<i>Sub-total</i>	<i>144,307.4</i>	<i>7,199.4</i>	<i>151,506.8</i>	<i>45.6%</i>
<b>Grand Total</b>	<b>296,335.4</b>	<b>36,217.6</b>	<b>332,553.0</b>	<b>100.0%</b>



# Alberta-Pacific FMU S18 Netdown Classification



Legend	
Prohibits Timber Harvesting	Recently Disturbed Areas
Provincial Park	Oil and Gas
Aboriginal Reserve	Inoperable / Isolated Stands
Ecological Reserve	Slopes > 45%
Protective Notations	Isolated Stands
PSP Buffers	Non-Forested Pre-91 Cutblocks
River Breaks (Deciduous Only)	Non-Forested Natural Disturbance Areas
Private Land Reduction	Non-Forested Stand Area
	Non-Commercial Stand Area
	Aquatic Features & Water Course Buffers
	Rivers, Lakes, Flooded Areas
	Water Course Buffer Productive
	Water Course Buffer Non-Productive
	Timber Harvesting Landbase
	Harvestable Deciduous
	Harvestable Mixedwood
	Harvestable Coniferous
	Harvestable Deciduous with Coniferous Understory
Land Tenure Status: Non-J Area	Embedded Non-J Land Classification: Grazing Leases
Aboriginal Reserves	Maintain Our Forest Blocks

# Alberta-Pacific FMA Area Landbase Summary Table

## FMU S18



### Forest Management Unit S18

Netdown Category	FMA Area(ha)	*Non-FMA Area(ha)	Total Area(ha)	Landbase (%)
<b>Prohibits/Precludes Timber Harvesting</b>				
Provincial Park	0.0	42.5	42.5	0.0%
Aboriginal Reserve	0.0	10,901.9	10,901.9	1.8%
Ecological Reserve	1,067.9	0.0	1,067.9	0.2%
Protected Notations (No Harvesting Permitted)	185.4	0.0	185.4	0.0%
PSP Buffers	95.2	0.0	95.2	0.0%
River Breaks	0.0	0.0	0.0	0.0%
Private Land	57.3	176.9	234.2	0.0%
<i>Sub-total</i>	<b>1,405.8</b>	<b>11,121.3</b>	<b>12,527.1</b>	<b>2.1%</b>
<b>Recently Disturbed Areas</b>				
Fire	3,337.1	15,803.7	19,140.8	3.2%
Oil and Gas	10,087.0	1,145.5	11,232.5	1.9%
<i>Sub-total</i>	<b>13,424.1</b>	<b>16,949.2</b>	<b>30,373.3</b>	<b>5.0%</b>
<b>Inoperable / Isolated Stands</b>				
Slope	0.0	0.0	0.0	0.0%
Isolated Harvestable stands	84.8	62.5	147.3	0.0%
Non-Forested (CC)	142.2	303.9	446.1	0.1%
Non-Forested Natural Disturbance	9,808.8	3,772.3	13,581.0	2.3%
Non-Forested Vegetated	25,735.2	19,819.7	45,555.0	7.6%
Anthropogenic Vegetated	1,131.9	291.0	1,422.9	0.2%
Anthropogenic Non-Vegetated	1,826.8	1,579.0	3,405.8	0.6%
Naturally Non-Vegetated	0.0	3.2	3.2	0.0%
Non-Commercial TPR	35,050.2	21,541.0	56,591.2	9.4%
Non-Commercial Species	34,202.6	19,374.7	53,577.3	8.9%
Non-Commercial Stand Density	1,124.9	903.9	2,028.8	0.3%
Non-Commercial Site Index	77,904.4	31,523.6	109,428.0	18.2%
Horizontal Stand Adjustment	595.6	20.3	615.9	0.1%
<i>Sub-total</i>	<b>187,607.4</b>	<b>99,195.1</b>	<b>286,802.5</b>	<b>47.6%</b>
<b>Water Course Buffers</b>				
Buffer	12,127.7	3,470.6	15,598.3	2.6%
<i>Sub-total</i>	<b>12,127.7</b>	<b>3,470.6</b>	<b>15,598.3</b>	<b>2.6%</b>
<b>Aquatic Features</b>				
Rivers	483.1	237.1	720.1	0.1%
Lakes	21,277.3	19,156.1	40,433.4	6.7%
Flooded Areas	3,147.0	224.0	3,371.1	0.6%
<i>Sub-total</i>	<b>24,907.4</b>	<b>19,617.2</b>	<b>44,524.6</b>	<b>7.4%</b>
<b>Timber Harvesting Landbase</b>				
Deciduous	111,708.3	9,751.8	121,460.1	20.2%
Deciduous / Coniferous	13,918.1	2,094.6	16,012.8	2.7%
Coniferous / Deciduous	16,337.8	3,354.4	19,692.1	3.3%
Coniferous	49,535.8	5,978.6	55,514.4	9.2%
<i>Sub-total</i>	<b>191,500.0</b>	<b>21,179.4</b>	<b>212,679.4</b>	<b>35.3%</b>
<b>Grand Total</b>	<b>430,972.3</b>	<b>171,532.8</b>	<b>602,505.1</b>	<b>100.0%</b>

\* Non FMA Area consists of a combination of Phase 3 and AVI data.





**ALBERTA  
PACIFIC**

**FOREST INDUSTRIES INC**

---

---

**Appendix III : Private Land Reductions**

---

---

**Timber Zone 1 (FMU S7)**

<i>Township</i>	<i>Section</i>	<i>¼ Section</i>	<i>Legal Subdivision</i>	<i>Percent Reduction</i>
68124	17	SE	00	1.24%
68124	21	SE	00	3.46%
68124	21	NE	09	3.51%
68124	21	NE	10	3.51%
68124	21	NE	16	3.51%
68124	22	SW	00	2.27%
68124	22	SE	00	2.27%
68124	22	NW	00	2.27%
68124	22	NE	00	2.27%
68124	27	SW	00	7.64%
68124	27	SE	00	7.64%
68124	27	NW	00	7.64%
68124	27	NE	00	7.64%
68124	33	SW	00	3.93%
68124	33	SE	00	3.93%
68124	33	NW	00	3.93%
68124	33	NE	00	3.93%
68124	34	SW	00	4.08%
68124	34	SE	00	4.08%
68124	34	NW	00	4.08%
68124	34	NE	00	4.08%
69124	3	SW	00	7.89%
69124	3	SE	00	7.89%
69124	3	NW	00	7.89%
69124	3	NE	00	7.89%
69124	10	SW	00	15.53%
69124	10	SE	00	15.53%
69124	10	NW	00	15.53%
69124	10	NE	00	15.53%
69124	15	SW	00	7.64%
69124	15	SE	00	7.64%
69124	15	NW	00	7.64%
69124	15	NE	00	7.64%
69124	22	SW	00	7.61%
69124	22	SE	00	7.61%
69124	22	NW	00	7.61%
69124	22	NE	00	7.61%
69124	26	SW	00	2.31%
69124	26	NW	00	3.81%
69124	26	NE	00	19.00%
69124	27	SE	00	34.31%
69124	35	SE	00	12.50%
69124	35	SW	00	3.81%
69124	35	NW	00	12.14%
69244	18	NW	00	3.13%
69254	25	SE	00	48.18%

**Timber Zone 2 (FMU L8)**

<i>Township</i>	<i>Section</i>	<i>¼ Section</i>	<i>Legal Subdivision</i>	<i>Percent Reduction</i>
No Private Land Identified				

**Timber Zone 3 (FMU L1)**

<i>Township</i>	<i>Section</i>	<i>¼ Section</i>	<i>Legal Subdivision</i>	<i>Percent Reduction</i>
68124	17	SE	00	1.24%
68124	21	SE	00	3.46%
68124	21	NE	09	3.51%
68124	21	NE	10	3.51%
68124	21	NE	16	3.51%
68124	22	SW	00	2.27%
68124	22	SE	00	2.27%
68124	22	NW	00	2.27%
68124	22	NE	00	2.27%
68124	27	SW	00	7.64%
68124	27	SE	00	7.64%
68124	27	NW	00	7.64%
68124	27	NE	00	7.64%
68124	33	SW	00	3.93%
68124	33	SE	00	3.93%
68124	33	NW	00	3.93%
68124	33	NE	00	3.93%
68124	34	SW	00	4.08%
68124	34	SE	00	4.08%
68124	34	NW	00	4.08%
68124	34	NE	00	4.08%
69124	3	SW	00	7.89%
69124	3	SE	00	7.89%
69124	3	NW	00	7.89%
69124	3	NE	00	7.89%
69124	10	SW	00	15.53%
69124	10	SE	00	15.53%
69124	10	NW	00	15.53%
69124	10	NE	00	15.53%
69124	15	SW	00	7.64%
69124	15	SE	00	7.64%
69124	15	NW	00	7.64%
69124	15	NE	00	7.64%
69124	22	SW	00	7.61%
69124	22	SE	00	7.61%
69124	22	NW	00	7.61%
69124	22	NE	00	7.61%
69124	26	SW	00	2.31%
69124	26	NW	00	3.81%
69124	26	NE	00	19.00%
69124	27	SE	00	34.31%
69124	35	SE	00	12.50%
69124	35	SW	00	3.81%
69124	35	NW	00	12.14%
70114	15	SW	00	6.25%
70114	15	SE	00	6.25%
70114	15	NW	00	6.25%
70114	15	NE	00	6.25%
70114	16	SW	00	1.00%
70114	16	SE	00	1.00%
70114	16	NW	00	1.00%

## Landbase Determination (v3.0) - Appendices

<i>Township</i>	<i>Section</i>	<i>¼ Section</i>	<i>Legal Subdivision</i>	<i>Percent Reduction</i>
70114	16	NE	00	1.00%
70114	17	SW	00	11.25%
70114	17	SE	00	11.25%
70114	17	NW	00	11.25%
70114	17	NE	00	11.25%
70114	31	SW	00	3.13%
70114	31	SE	00	3.13%
70114	31	NW	00	3.13%
70114	31	NE	00	3.13%
72104	6	SW	00	6.25%
72104	6	SE	00	6.25%
72104	6	NW	00	6.25%
72104	6	NE	00	6.25%
72104	7	SW	00	7.50%
72104	7	SE	00	7.50%
72104	7	NW	00	7.50%
72104	7	NE	00	7.50%
72104	8	SW	00	13.75%
72104	8	SE	00	13.75%
72104	8	NW	00	13.75%
72104	8	NE	00	13.75%
72104	17	SW	00	12.50%
72104	17	SE	00	12.50%
72104	17	NW	00	12.50%
72104	17	NE	00	12.50%
72114	1	SW	00	12.50%
72114	1	SE	00	12.50%
72114	1	NW	00	12.50%
72114	1	NE	00	12.50%
72114	2	SW	00	12.50%
72114	2	SE	00	12.50%
72114	2	NW	00	12.50%
72114	2	NE	00	12.50%
72114	3	SW	00	6.25%
72114	3	SE	00	6.25%
72114	3	NW	00	6.25%
72114	3	NE	00	6.25%
7494	28	SW	00	15.46%
7494	28	SE	00	15.46%
7494	28	NW	00	15.46%
7494	28	NE	00	15.46%
7494	33	SW	00	7.60%
7494	33	SE	00	7.60%
7494	33	NW	00	7.60%
7494	33	NE	00	7.60%

**Timber Zone 4 (FMU L2)**

<i>Township</i>	<i>Section</i>	<i>¼ Section</i>	<i>Legal Subdivision</i>	<i>Percent Reduction</i>
71214	19	SW	00	9.79%
71214	19	SE	00	9.79%
71214	19	NW	00	9.79%
71214	19	NE	00	9.79%

**Timber Zone 5 (FMU L3)**

<i>Township</i>	<i>Section</i>	<i>¼ Section</i>	<i>Legal Subdivision</i>	<i>Percent Reduction</i>
78174	30	SE	00	1.00%
78174	30	SW	00	75.00%
78184	25	SW	00	68.75%
78184	25	SE	00	68.75%
78184	25	NW	00	68.75%
78184	25	NE	00	68.75%
79144	18	NE	00	5.16%
83164	17	NW	00	23.31%
83164	18	NE	16	5.88%
83164	18	NE	10	5.88%
83164	18	NE	09	6.00%
83164	18	NE	15	6.00%
83164	19	SE	00	75.00%

**Timber Zone 6 (FMU L11)**

<i>Township</i>	<i>Section</i>	<i>¼ Section</i>	<i>Legal Subdivision</i>	<i>Percent Reduction</i>
7354	19	SW	00	7.50%
7354	19	SE	00	7.50%
7354	19	NW	00	7.50%
7354	19	NE	00	7.50%
7354	20	SW	00	5.00%
7354	20	SE	00	5.00%
7354	20	NW	00	5.00%
7354	20	NE	00	5.00%
7354	24	SW	00	10.00%
7354	24	SE	00	10.00%
7354	24	NW	00	10.00%
7354	24	NE	00	10.00%
7354	25	SW	00	1.00%
7354	25	SE	00	1.00%
7354	25	NW	00	1.00%
7354	25	NE	00	1.00%
7354	26	SW	00	18.75%
7354	26	SE	00	18.75%
7354	26	NW	00	18.75%
7354	26	NE	00	18.75%
7354	27	SW	00	5.00%
7354	27	SE	00	5.00%
7354	27	NW	00	5.00%
7354	27	NE	00	5.00%
7354	28	SW	00	7.50%
7354	28	SE	00	7.50%
7354	28	NW	00	7.50%
7354	28	NE	00	7.50%
7354	29	SW	00	13.75%
7354	29	SE	00	13.75%
7354	29	NW	00	13.75%
7354	29	NE	00	13.75%
7354	30	SW	00	18.75%
7354	30	SE	00	18.75%
7354	30	NW	00	18.75%
7354	30	NE	00	18.75%
7354	32	SW	00	7.50%
7354	32	SE	00	7.50%
7354	32	NW	00	7.50%
7354	32	NE	00	7.50%
7684	4	SW	00	2.18%
7684	4	SE	00	2.18%
7684	4	NW	00	2.18%
7684	4	NE	00	2.18%
7684	5	SW	00	5.78%
7684	5	SE	00	5.78%
7684	5	NW	00	5.78%
7684	5	NE	00	5.78%
7684	8	SW	00	7.65%
7684	8	SE	00	7.65%
7684	8	NW	00	7.65%

## Landbase Determination (v3.0) - Appendices

<i>Township</i>	<i>Section</i>	<i>¼ Section</i>	<i>Legal Subdivision</i>	<i>Percent Reduction</i>
7684	8	NE	00	7.65%
7684	16	SW	00	6.19%
7684	16	SE	00	6.19%
7684	16	NW	00	6.19%
7684	16	NE	00	6.19%
7684	17	SW	00	3.80%
7684	17	SE	00	3.80%
7684	17	NW	00	3.80%
7684	17	NE	00	3.80%
7684	21	SW	00	3.59%
7684	21	SE	00	3.59%
7684	21	NW	00	3.59%
7684	21	NE	00	3.59%
7684	22	SW	00	9.50%
7684	22	SE	00	9.50%
7684	22	NW	00	9.50%
7684	22	NE	00	9.50%
7684	25	SW	00	8.00%
7684	25	SE	00	8.00%
7684	25	NW	00	8.00%
7684	25	NE	00	8.00%
7684	26	SW	00	8.24%
7684	26	SE	00	8.24%
7684	26	NW	00	8.24%
7684	26	NE	00	8.24%
7684	27	SW	00	3.41%
7684	27	SE	00	3.41%
7684	27	NW	00	3.41%
7684	27	NE	00	3.41%
7784	1	NW	00	4.46%
7784	1	NE	09	4.46%
7784	1	NE	10	4.46%
7784	1	NE	15	4.46%
7784	12	SW	00	7.57%
7784	12	SE	00	7.57%
7784	12	NW	00	7.57%
7784	12	NE	00	7.57%
7784	13	SW	00	7.56%
7784	13	SE	00	7.56%
7784	13	NW	00	7.56%
7784	13	NE	00	7.56%
7784	24	SW	00	7.91%
7784	24	SE	00	7.91%
7784	24	NW	00	7.91%
7784	24	NE	00	7.91%
7784	25	SW	00	42.53%
7784	25	SE	00	42.53%
7784	25	NW	00	42.53%
7784	25	NE	00	42.53%
7784	36	SW	00	8.10%
7784	36	SE	00	8.10%
7784	36	NW	00	8.10%
7784	36	NE	00	8.10%
7944	30	SW	00	1.00%
7944	30	SE	00	1.00%

## Landbase Determination (v3.0) - Appendices

<i>Township</i>	<i>Section</i>	<i>¼ Section</i>	<i>Legal Subdivision</i>	<i>Percent Reduction</i>
7944	30	NW	00	1.00%
7944	30	NE	00	1.00%
7944	31	SW	00	1.00%
7944	31	SE	00	1.00%
7944	31	NW	00	1.00%
7944	31	NE	00	1.00%

**Timber Zone 7 (FMU S18)**

<i>Township</i>	<i>Section</i>	<i>¼ Section</i>	<i>Legal Subdivision</i>	<i>Percent Reduction</i>
78224	16	SW	00	25.00%
78224	16	SE	00	25.00%
78224	16	NW	00	25.00%
78224	16	NE	00	25.00%
78224	17	SW	00	26.56%
78224	17	SE	00	26.56%
78224	17	NW	00	26.56%
78224	17	NE	00	26.56%

**Timber Zone 8 (FMU A14)**

<i>Township</i>	<i>Section</i>	<i>¼ Section</i>	<i>Legal Subdivision</i>	<i>Percent Reduction</i>
8884	13	SW	00	3.48%
8884	13	SE	00	3.48%
8884	13	NW	00	3.48%
8884	13	NE	00	3.48%
8884	19	SE	00	2.38%
8884	19	NE	00	2.41%
8884	20	NE	00	100.00%
8884	5	NE	00	100.00%
8884	20	NW	00	50.00%
8884	22	NE	16	1.58%
8884	22	NE	15	1.58%
8884	22	NE	09	1.58%
8884	22	NE	10	1.58%
8884	23	SW	00	8.95%
8884	23	SE	00	8.95%
8884	23	NW	00	8.95%
8884	23	NE	00	8.95%
8884	24	SW	00	6.41%
8884	24	SE	00	6.41%
8884	24	NW	00	6.41%
8884	24	NE	00	6.41%
8884	25	SE	00	93.94%
8884	25	NW	00	14.34%
8884	25	NE	00	2.33%
8884	26	NW	00	35.14%
8884	26	NE	00	27.13%
8884	27	SE	00	20.07%
8884	27	SW	00	4.13%
8884	27	NW	00	1.24%
8884	27	NE	00	31.14%
8884	28	SE	00	3.84%
8884	28	SW	00	4.78%
8884	29	SE	00	0.74%
8884	29	Sw	00	1.00%
8884	29	NE	00	1.28%
8884	31	NW	00	10.38%
8884	31	NE	00	74.25%
8884	32	NW	00	37.13%
8894	10	SW	00	5.30%
8894	10	SE	00	5.30%
8894	10	NW	00	5.30%
8894	10	NE	00	5.30%
8894	22	SE	00	8.96%
8894	22	SW	00	18.75%
8894	22	NW	00	14.02%
8894	22	NE	00	35.24%
8894	26	SE	00	31.96%
8894	25	SW	00	7.50%
8894	25	NE	00	5.63%
8894	26	NE	00	12.63%
8894	27	SE	00	27.39%

## Landbase Determination (v3.0) - Appendices

<i>Township</i>	<i>Section</i>	<i>¼ Section</i>	<i>Legal Subdivision</i>	<i>Percent Reduction</i>
8894	27	SW	00	0.63%
8894	27	NW	00	58.67%
8894	34	SW	00	72.48%
8894	34	NW	00	32.39%
8894	34	NE	00	85.02%
8894	35	SE	00	0.26%
8894	35	SW	00	75.80%
8894	35	NW	00	7.14%
8894	36	SW	00	1.00%
8894	36	SE	00	1.00%
8894	36	NW	00	1.00%
8894	36	NE	00	1.00%
8894	1	SW	00	1.00%
8994	1	SE	00	27.50%
8994	1	SW	00	3.09%
8994	1	NW	00	18.75%
8994	2	NE	00	25.00%
8994	4	SW	00	9.38%
8994	4	NW	00	10.00%
8994	4	NE	00	34.24%
8994	11	SE	00	26.50%
8994	14	SW	00	89.75%
8994	15	SE	00	87.50%
8994	17	SW	00	100.00%
8994	17	SE	00	100.00%
8994	17	NW	00	100.00%
8994	17	NE	00	100.00%
8994	4	SW	00	100.00%
8994	4	SE	00	100.00%
8994	4	NW	00	100.00%
8994	4	NE	00	100.00%
8994	15	NW	00	16.06%
8994	18	SW	00	1.88%
8994	22	SW	00	14.38%
8794	1	SW	03	50.00%
8794	1	SW	04	50.00%
8794	1	SW	05	50.00%
8794	1	SW	06	50.00%
8794	1	NW	11	50.00%
8794	1	NW	12	50.00%
8794	1	NW	13	50.00%
8794	1	NW	14	50.00%
8794	1	NE	00	12.94%

**Timber Zone 9 (FMU S11)**

<i>Township</i>	<i>Section</i>	<i>¼ Section</i>	<i>Legal Subdivision</i>	<i>Percent Reduction</i>
No Private Land Identified				

**Timber Zone 10 (FMUs S12 & S13)**

<i>Township</i>	<i>Section</i>	<i>¼ Section</i>	<i>Legal Subdivision</i>	<i>Percent Reduction</i>
83224	6	SW	00	1.00%
83224	6	SE	00	1.00%
83224	6	NW	00	1.00%
83224	6	NE	00	1.00%

**Timber Zone 11 (FMUs A4, A5, A7 & A8)**

<i>Township</i>	<i>Section</i>	<i>¼ Section</i>	<i>Legal Subdivision</i>	<i>Percent Reduction</i>
9194	8	NW	00	52.19%
9194	8	NE	00	31.69%
9194	9	NW	00	43.75%
9194	9	NE	00	56.06%
9194	10	NW	00	68.31%
9194	10	NE	00	80.56%
9194	14	SW	00	56.44%
9194	14	NW	00	5.19%
9194	15	NW	00	30.13%
9194	15	NE	00	17.75%
9194	16	NW	00	54.75%
9194	16	NE	00	42.44%
9194	17	SW	00	1.00%
9194	17	SE	00	1.00%
9194	17	NW	00	1.00%
9194	17	NE	00	1.00%
9194	14	SW	00	1.00%
9194	14	SE	00	1.00%
9194	14	NW	00	1.00%
9194	14	NE	00	1.00%
9194	17	SW	00	1.00%
9194	17	SE	00	1.00%
9194	17	NW	00	1.00%
9194	17	NE	00	1.00%
9194	15	SW	00	1.00%
9194	15	SE	00	1.00%
9194	15	NW	00	1.00%
9194	15	NE	00	1.00%
9194	17	SW	00	1.00%
9194	17	SE	00	1.00%
9194	17	NW	00	1.00%
9194	17	NE	00	1.00%
9194	16	SW	00	1.00%
9194	16	SE	00	1.00%
9194	16	NW	00	1.00%
9194	16	NE	00	1.00%
9194	31	NE	00	72.50%
9194	32	NW	00	1.69%
91104	11	NW	00	1.00%
9094	6	NW	00	1.08%
9094	8	SW	00	25.88%
9094	8	NW	00	28.63%
9294	4	NW	00	75.00%
9294	4	NE	00	25.00%
9294	5	SE	00	37.50%
9294	5	SW	00	90.63%
9294	6	SE	00	96.88%
9294	6	SW	00	25.00%
9294	6	NW	00	25.00%
9294	6	NE	00	87.50%
9294	7	SE	00	9.38%

## Landbase Determination (v3.0) - Appendices

<i>Township</i>	<i>Section</i>	<i>¼ Section</i>	<i>Legal Subdivision</i>	<i>Percent Reduction</i>
9294	7	NW	00	6.25%
9294	8	SE	00	96.88%
9294	8	SW	00	50.00%
9294	8	NE	00	12.50%
9294	9	SE	00	100.00%
9294	9	NW	00	56.25%
9294	9	NE	00	100.00%
9294	10	SW	00	56.25%
9294	10	NW	00	37.50%
9294	16	SE	00	12.50%
9294	18	SW	00	93.75%
9294	19	SE	00	37.50%
9294	19	NE	00	62.50%
9294	19	NW	00	100.00%
9294	20	NW	00	43.75%
9294	28	NW	00	12.50%
9294	29	SE	00	12.50%
9294	29	SW	00	68.75%
9294	29	NE	00	75.00%
9294	30	SW	00	96.88%
9294	30	NW	00	37.50%
9294	30	NE	00	93.75%
9294	31	SE	00	37.50%
9294	32	SW	00	93.75%
9294	32	NW	00	31.25%
9294	32	NE	00	93.75%
9294	33	SE	00	12.50%
9294	33	SW	00	75.00%
9294	33	NW	00	81.25%
9294	33	NE	00	37.50%
92104	9	SE	00	0.06%
92104	9	NE	00	12.81%
92104	10	SE	00	0.69%
92104	10	SW	00	0.81%
92104	11	SE	00	0.38%
92104	11	SW	00	0.56%
92104	12	SE	00	1.00%
92104	12	SW	00	0.25%
92104	16	SE	00	100.00%
92104	25	SW	00	1.00%
92104	25	SE	00	1.00%
92104	25	NW	00	1.00%
92104	25	NE	00	1.00%
92104	1	SW	00	1.00%
92104	1	SE	00	1.00%
92104	1	NW	00	1.00%
92104	1	NE	00	1.00%
92104	25	SW	00	1.00%
92104	25	SE	00	1.00%
92104	25	NW	00	1.00%
92104	25	NE	00	1.00%
92104	8	SW	00	1.00%
92104	8	SE	00	1.00%
92104	8	NW	00	1.00%
92104	8	NE	00	1.00%

## Landbase Determination (v3.0) - Appendices

<i>Township</i>	<i>Section</i>	<i>¼ Section</i>	<i>Legal Subdivision</i>	<i>Percent Reduction</i>
92104	25	NW	00	25.38%
92104	35	SE	00	20.69%
8994	1	SE	00	27.50%
8994	1	SW	00	3.09%
8994	1	NW	00	18.75%
8994	2	NE	00	25.00%
8994	4	SW	00	9.38%
8994	4	NW	00	10.00%
8994	4	NE	00	34.24%
8994	11	SE	00	26.50%
8994	14	SW	00	89.75%
8994	15	SE	00	87.50%
8994	17	SW	00	100.00%
8994	17	SE	00	100.00%
8994	17	NW	00	100.00%
8994	17	NE	00	100.00%
8994	4	SW	00	100.00%
8994	4	SE	00	100.00%
8994	4	NW	00	100.00%
8994	4	NE	00	100.00%
8994	15	NW	00	16.06%
8994	18	SW	00	1.88%
8994	22	SW	00	14.38%
89104	12	SE	00	0.44%
89104	12	NW	00	43.75%
89104	12	NE	00	5.63%
89104	14	SE	00	3.75%
89104	23	SE	00	2.50%
89104	23	NE	00	100.00%
89104	26	SW	00	17.34%
9394	5	SE	00	12.50%
94104	31	SW	00	1.00%
94104	31	SE	00	1.00%
94104	31	NW	00	1.00%
94104	31	NE	00	1.00%
94114	23	SE	00	50.00%
94114	23	SW	00	50.00%
94114	23	NW	00	50.00%
94114	24	SW	00	100.00%
94114	25	NE	00	1.25%
94114	26	SW	00	12.50%
94114	35	NW	00	100.00%
94114	36	SE	00	1.00%
95104	6	SE	00	100.00%
97114	1	SW	00	30.00%
97114	1	SE	00	30.00%
97114	1	NW	00	30.00%
97114	1	NE	00	30.00%



**ALBERTA  
PACIFIC**

**FOREST INDUSTRIES INC**

---

---

**Appendix IV : Protective Notations**

---

---

## Timber Zone 1 (FMU S7)

### Summary of PNTs and associated harvest status.

<i>PNT</i>	<i>Status</i>	<i>Comments</i>	<i>Area (ha)</i>
PNT000050	Maybe (Y)	Agency permission needed	16.8
PNT000211	Yes		670
PNT700034	Yes		4456
PNT700119		No info	
PNT710887	Yes		4656
PNT710888	Yes		7675
PNT710891	Yes		7448
PNT710922	Yes		11,815.50
PNT753508	Yes		?
PNT764167	Yes		?
PNT764242	Yes		?
PNT764244	Yes		?
PNT775805	Yes		?
PNT775866	Yes		129.5
PNT776114	Yes		?
PNT776304	Yes		129
PNT780179	Yes		?
PNT790250	Yes		?
PNT790442	Yes	Public wood cutting area	?
PNT800855	Yes		?
PNT810603	Yes		?
PNT820005	Yes		48.4
PNT820084	Yes		?
PNT820221	Yes		?
PNT820652	Yes		?
PNT830438	Yes	Public wood cutting area	?
PNT840283	Yes		319
PNT840300	Yes		?
PNT840316	Yes		?
PNT840622	Yes		246
PNT850199	Yes		?
PNT850283	Yes		?
PNT850569	Yes		
PNT870531	Yes		?
PNT910205	Yes		518
PNT920390	Yes		1243
PNT920392	Yes		584.4

**Summary of PNTs and associated harvest status. (Continued)**

<i>PNT</i>	<i>Status</i>	<i>Comments</i>	<i>Area (ha)</i>
PNT920393	Yes		458.5
PNT920394	Yes		129.5
PNT940222	Maybe (Y)	Agency permission required Industrial ok	32.37
PNT940272	Yes		?
PNT950081	Yes		?
PNT950193	Yes		?
PNT970091	Yes		1343
PNT980084	Yes		?
PNT990156	Yes		?

**Summary of land area associated with PNTs having a 'No' or 'Maybe No' harvest status.**

<i>PNT</i>	<i>Quarter Section</i>	<i>PNT</i>	<i>Quarter Section</i>	<i>PNT</i>	<i>Quarter Section</i>
None of the PNTs identified prohibit timber harvesting.					

## Timber Zone 2 (FMU L8)

### Summary of PNTs and associated harvest status.

<i>PNT</i>	<i>Status</i>	<i>Comments</i>	<i>Area (ha)</i>
PNT740040	Yes		520
PNT775500	Yes		339
PNT776303	Yes		268
PNT810310	Yes		64
PNT810537	Yes		259
PNT830338	Yes		
PNT840319	Yes		114
PNT840626	Yes		
PNT870826	Yes		451.24
PNT870856	Yes		114
PNT890028	Yes		267
PNT890161	Yes		
PNT890612	Maybe(N)	Agency permission needed Industrial ok	403
PNT890676	Maybe (N)	Agency Permission needed Industrial ok	149.85
PNT900470	No	Historical site	
PNT910111	Yes		
PNT920076	No	Seed Production area	12.4
PNT920077	No	Seed Production area	15.4
PNT920101	Maybe (Y)	Agency permission required oil and gas ok	30.25
PNT920102	Maybe (Y)	Agency permission required oil and gas ok	21
PNT930135	Yes		
PNT930243	No		

### Summary of land area associated with PNTs having a 'No' or 'Maybe No' harvest status.

<i>PNT</i>	<i>Quarter Section</i>	<i>PNT</i>	<i>Quarter Section</i>	<i>PNT</i>	<i>Quarter Section</i>
<b>PNT890612</b>	407218013	<b>PNT890676</b>	407214191	<b>PNT930135</b>	407316311
	407218104		407214193		407316312
<b>PNT890612</b>	407218122		407214194		407316313
	407218123		407214301		407316314
	407218124	<b>PNT900470</b>	407019301		407317361
	407218131	<b>PNT910111</b>	407119352		407317364
	407218132	<b>PNT920076</b>	407215063		407416052
	407218134		407215064		407416061
		<b>PNT920077</b>	407214304		407416062
		<b>PNT920101</b>	407214174	<b>PNT930243</b>	407019323
			407214201		
		<b>PNT920102</b>	407215034		

## Timber Zone 3 (FMU L1)

### Summary of PNTs and associated harvest status.

<i>PNT</i>	<i>Status</i>	<i>Comments</i>	<i>Area (ha)</i>
PNT000142	Yes	IN L01 - White Zone	61.7
PNT000144	No	IN L2J not L1	0
PNT610008	Yes		64.7
PNT712258	Yes		40
PNT750003	Yes		275
PNT750004	Yes		720
PNT760061	Yes		1088
PNT764583	Yes		381
PNT764639	Yes		194
PNT780113	Maybe (N)	Industrial/Residential/Commercial only	64.7
PNT820043	Yes		15
PNT830596	Yes		283
PNT831183	Yes		291
PNT840406	Yes		164
PNT850062	Yes		259
PNT860132	Yes		194
PNT870272	Yes		906
PNT880474	Maybe(N)	Agency permission needed Commercial//r ok	64.7
PNT880475	Yes		130.7
PNT890606	Maybe (N)	Agency permission needed Industrial ok	?
PNT890609	Maybe (N)	Agency permission needed Industrial ok	539
PNT890614	Maybe (N)	Agency Permission needed Industrial ok	?
PNT890678	Maybe (N)	Agency permission needed Industrial ok	366.5
PNT890683	Maybe N)	Agency permission needed oil and gas ok	1456.8
PNT920096	Maybe (Y)	Agency permission needed oil and gas ok	17.6
PNT920161	Yes		104.9
PNT930124	Yes		680
PNT940062	Maybe (Y)	Agency permission required Industrial Ok	1097.66
PNT970157	Yes		64.7
PNT970180	Yes		129.5
PNT970181	Yes		64.7
PNT980027	Yes		64.7
PNT980028	Yes		64.7
PNT980030	Yes		35.1
PNT980031	Yes		29.6
PNT990036	Yes		64.7
PNT990037	Yes		64.7
PNT990135	Maybe (N)	Agency Permission required	18.6

**Summary of land area associated with PNTs having a ‘No’ or ‘Maybe No’ harvest status.**

<i>PNT</i>	<i>Quarter Section</i>	<i>PNT</i>	<i>Quarter Section</i>	<i>PNT</i>	<i>Quarter Section</i>
<b>PNT000144</b>	407312212	<b>PNT890606</b>	407211251	<b>PNT890683</b>	407111333
<b>PNT780113</b>	406911304		407211254		407111334
<b>PNT880474</b>	406811062		407211361		407211041
<b>PNT890609</b>	406910293		407211362		407211042
	406910294		407211363		407211043
	406910303		407211364		407211044
	406910304	<b>PNT890614</b>	407309073		407211051
	406910331		407309182		407211052
	406910332		407309183		407211053
	406910333	<b>PNT890678</b>	407111161		407211054
	406910334		407111162		407211081
	406910343		407111163		407211082
	407010031		407111164		407211083
	407010034		407111211		407211084
	407010101		407111212		407211092
	407010104		407111213		407211093
	407010112		407111214		407211152
	407010113	<b>PNT990135</b>	407313272		407211153
			407313273		407211161
			407313281		407211162
			407313284		407211163
					407211164
					407211171
					407211201
					407211202
					407211203
					407211204
					407211213
					407211214
					407211291
					407211292

## Timber Zone 4 (FMU L2)

### Summary of PNTs and associated harvest status.

<i>PNT</i>	<i>Status</i>	<i>Comments</i>	<i>Area (ha)</i>
PNT010044	Yes		906
PNT010360	Maybe (Y)	Agency permission needed	11.4
PNT650007	Yes		2590
PNT650035	Yes		7770
PNT800811	Yes		13749
PNT810615	Yes		1626
PNT810619	Yes		643
PNT830045	Yes		1425
PNT830338	Yes		4465
PNT830477	Yes		964
PNT850569	Yes		429
PNT890161	Yes		160
PNT900455	Yes		352.9
PNT900470	No	Historical site	35.2
PNT910075	Yes		516
PNT910095	Yes		0
PNT910111	Yes		12.14
PNT910122	Maybe (N)	Agency permission required	?
PNT910335	Maybe (N)	Agency permission required Industrial ok	?
PNT920078	No	Seed Production area	13.6
PNT920093	Maybe (Y)	Agency permission needed oil and gas ok	26.4
PNT920098	Maybe (Y)	Agency permission needed oil and gas ok	29
PNT920099	Maybe (Y)	Agency permission required oil and gas ok	45
PNT920160	Maybe (Y)	Agency permission required	10.27
PNT920221	Maybe (N)	Agency permission required PSP	2.25
PNT930243	No		140.5
PNT980171	Maybe (N)	Agency Permission required Historical Site	44.5
PNT990001	Yes		24.2

**Summary of land area associated with PNTs having a ‘No’ or ‘Maybe No’ harvest status.**

<i>PNT</i>	<i>Quarter Section</i>	<i>PNT</i>	<i>Quarter Section</i>	<i>PNT</i>	<i>Quarter Section</i>
<b>PNT900470</b>	407019301	<b>PNT920078</b>	407623132		
<b>PNT910335</b>	407122331		407623141		
	407222051	<b>PNT930243</b>	407019323		
	407222082	<b>PNT980171</b>	407123063		
	407223124				
	407223131				
	407223132				
	407223133				
	407223144				
	407223231				
	407223234				
	407223243				
	407223261				
	407223264				
	407223351				
	407223353				
	407223354				
	407322033				
	407322042				
	407322043				
	407322044				
	407322051				
	407322052				
	407322053				
	407322063				
	407322064				
	407322101				
	407323011				
	407323012				
	407323013				
	407323014				
	407323021				
	407323022				
	407323024				

## Timber Zone 5 (FMU L3)

### Summary of PNTs and associated harvest status.

<i>PNT</i>	<i>Status</i>	<i>Comments</i>	<i>Area (ha)</i>
PNT742878	Yes		259
PNT742941	Yes		323.7
PNT750045	Yes		389.5
PNT770039	Yes		32.4
PNT780070	Yes		32.3
PNT780890	Yes		226
PNT782940	Yes		275
PNT840008	Yes		4257
PNT840626	Yes		4338
PNT860103	Yes		64
PNT860277	Yes		259
PNT880186	No	Boivin natural area	15.5
PNT880187	No	Boivin natural area	2793
PNT890611	Maybe (N)	Agency permission needed Industrial ok	132
PNT890677	Maybe (N)	Agency Permission needed Industrial ok	604.75
PNT920100	Maybe (Y)	Agency permission required oil and gas ok	23.5
PNT920103	Maybe (Y)	Agency permission required oil and gas ok	25.95
PNT920118	Maybe (Y)	Agency permission required	13.6
PNT920119	Maybe (Y)	Agency permission required	16.1
PNT920157	Maybe (Y)	Agency permission required	4
PNT930135	Yes		806.8
PNT940165	Yes		64.7

### Summary of land area associated with PNTs having a 'No' or 'Maybe No' harvest status.

<i>PNT</i>	<i>Quarter Section</i>	<i>PNT</i>	<i>Quarter Section</i>	<i>PNT</i>	<i>Quarter Section</i>
<b>PNT880186</b>	407916071	<b>PNT880187</b>	407917243		
	407916072		407917244		
	407916073		407917251		
	407916074		407917252		
	407916181		407917253		
<b>PNT880186</b>	407916182		407917254		
	407916183		407917261		
	407916184		407917262		
	407916191		407917263		
	407916192		407917264		
	407916193		407917271		
	407916194		407917273		
	407916301		407917274		
	407916302		407917351		
	407916303		407917352		
407916304		407917353			

<i>PNT</i>	<i>Quarter Section</i>	<i>PNT</i>	<i>Quarter Section</i>	<i>PNT</i>	<i>Quarter Section</i>
	407917111		407917354		
	407917112		407917361		
	407917113		407917362		
	407917114		407917363		
	407917121		407917364		
	407917122	<b>PNT890611</b>	407418132		
	407917123		407418133		
	407917124		407418141		
	407916311		407418144		
	407916312	<b>PNT890677</b>	407717311		
	407916313		407717312		
	407916314		407717313		
	407917131		407717314		
	407917132		407717323		
	407917133		407717324		
	407917134				
	407917141				
	407917142				
	407917143				
	407917144				
	407917151				
	407917154				
	407917221				
	407917224				
	407917231				
	407917232				
	407917233				
	407917234				
	407917241				
	407917242				

## Timber Zone 6 (FMU L11)

### Summary of PNTs and associated harvest status.

<i>PNT</i>	<i>Status</i>	<i>Comments</i>	<i>Area (ha)</i>
PNT000117	No	Conklin Hamlet	518
PNT880489	Yes		?
PNT890605	Yes		?
PNT890674	Maybe (N)	Agency permission needed Industrial ok	609.4
PNT880489	Yes		?
PNT890262	Yes		64.7
PNT890605	Yes		?
PNT890608	Maybe (N)	Agency permission needed Industrial ok	?
PNT910116	Maybe (N)	Agency permission required	?
PNT910119	Maybe (N)	Agency permission required	?
PNT920094	Maybe (Y)	Agency permission needed oil and gas ok	21.2
PNT930128	Yes		64.7
PNT860088	Yes		8
PNT860164	Yes		63
PNT890247	No		215
PNT910117	Maybe (N)	Agency permission required	2668.6
PNT920095	Maybe (Y)	Agency permission needed oil and gas ok	16.7
PNT920097	Maybe (Y)	Agency permission needed oil and gas ok	25.8
PNT970309	Yes		960

### Summary of land area associated with PNTs having a 'No' or 'Maybe No' harvest status.

<i>NT</i>	<i>Quarter Section</i>	<i>PNT</i>	<i>Quarter Section</i>	<i>PNT</i>	<i>Quarter Section</i>
<b>PNT000117</b>	407608354	<b>PNT910117</b>	407903293	<b>PNT910119</b>	407403191
	407708021		407903301		407403192
	407708022		407903302		407403193
	407708023		407903303		407403194
	407708024		407903304		407403202
	407708111		407903311		407403203
	407708112		407903312		407403204
	407708114		407903313		407403291
<b>PNT890247</b>	408306084	407903314	407403292		
	408306162	407903321	407403293		
	408306163	407903322	407403294		
	408306171	407903324	407403322		
	408306172	407903332	407403323		
<b>PNT890608</b>	407305243	407903333	407404224		
	407305244	407903334	407404233		
	407305251	407904254	407404234		
	407305252	407904361	407404243		
	407305253	407904363	407404244		
	407305254	407904364	407404251		
	407305261	408003032	407404252		

<i>NT</i>	<i>Quarter Section</i>	<i>PNT</i>	<i>Quarter Section</i>	<i>PNT</i>	<i>Quarter Section</i>
	407305264		408003033		407404261
<b>PNT890674</b>	407712053		408003041		407404262
	407712054		408003042		407404271
	407712061		408003043		407404272
	407712062		408003051		407404273
	407712063		408003052		407404274
	407712064		408003053		407404311
	407712071		408003054		407404312
	407712072		408003071		407404313
	407712081		408003072		407404314
	407712082		408003074		407404321
	407713011		408003081		407404323
	407713014		408003082		407404324
<b>PNT910116</b>	407303303		408003083		407404331
	407303304		408003084		407404332
	407303311		408003091		407404333
	407303312		408003092		407404342
	407303314		408003093		407405361
	407304253		408003094		407405362
	407304254		408003102		407405363
	407304362		408003152		407405364
	407304363		408003153		407503052
	407403052		408003154		407503053
	407403053		408003161		407503054
	407403061		408003162		407503081
	407403064		408003163		407503082
<b>PNT910116</b>	407403071	<b>PNT910117</b>	408003164		407503083
	407403072		408003171		407503084
	407403073		408003174		407503172
	407404012		408003211		407503181
	407404021		408003214		407503182
	407404024		408003221		407504131
	407404111		408003222		407504133
	407404114		408003224		407504134
	407404121		408003271		407504181
	407404122		408003272		407504182
	407404123		408003281		407504183
	407404124		408004011		407504184
	407404132		408004012		407504193
	407404141		408004013		407504233
<b>PNT980188</b>	408407104		408004014		407504234
			408004121		407504242
		<b>PNT910119</b>	407604042		407504243
			407604043		407504262
			407604051		407504263
			407604054		407504274

<i>NT</i>	<i>Quarter Section</i>	<i>PNT</i>	<i>Quarter Section</i>	<i>PNT</i>	<i>Quarter Section</i>
			407604091		407504293
			407604092		407504301
			407604093		407504302
			407604094		407504304
			407604103		407504321
			407604104		407504322
			407604111		407504324
			407604112		407504333
			407604113		407504341
			407604121		407504352
			407604122		407504353
			407604123		407505011
			407604124		407505012
			407604131		407505013
			407604132		407505014
			407604133		407505122
			407604142		407505123
			407604143		407505132
			407604144		407505133
			407604024		407505241
			407604034		407505242
					407505244
					407604022
					407604023

## Timber Zone 7 (FMU S18)

### Summary of PNTs and associated harvest status.

<i>PNT</i>	<i>Status</i>	<i>Comments</i>	<i>Area (ha)</i>
PNT753874	Yes		?
PNT765169	Yes		?
PNT775919	Yes		259
PNT790399	Yes	Public wood cutting area	?
PNT820032	Yes		?
PNT860053	No	Poss rec site	?
PNT860202	Yes		?
PNT880001	Maybe (Y)	Seed Source	?
PNT910419	No	Oil and gas recreation only	?
PNT940356	Yes		2525.3

### Summary of land area associated with PNTs having a 'No' or 'Maybe No' harvest status.

<i>PNT</i>	<i>Quarter Section</i>	<i>PNT</i>	<i>Quarter Section</i>	<i>PNT</i>	<i>Quarter Section</i>
<b>PNT910419</b>	407924203	<b>PNT910419</b>	408126101	<b>PNT860053</b>	408126022
	407924204		408126104		408126031
	407924213		408126221		408126034
	407924214		408126224		408126151
	407924223		408126271		408126154
	407924233		408126274		
	407924262		408126341		
	407924271		408126352		
	407924272		408126353		
	407924301		408225203		
	407924304		408225204		
	407924311		408225291		
	407924312		408225292		
	407925253		408225301		
	407925263		408225302		
	407925264		408225303		
	407925361		408225304		
	408024021		408226022		
	408024022		408226023		
	408024031		408226024		
	408024032		408226111		
	408024041		408226114		
	408024042		408226133		
	408024043		408226141		
	408024081		408226242		
	408024083		408226244		
	408024084		408226254		
	408024092				
	408024172				

## Timber Zone 8 (FMU A14)

### Summary of PNTs and associated harvest status.

<i>PNT</i>	<i>Status</i>	<i>Comments</i>	<i>Area (ha)</i>
PNT000025	Maybe (Y)	Flight path protection	2.84
PNT000204	Maybe (Y)	Agency permission needed	275
PNT010016	No	Industrial only	129.5
PNT010193	Yes		62.5
PNT010261	No	Industrial Allowed	60.5
PNT020011	No		0.91
PNT020101	Yes	Public wood cutting area	987
PNT700304	Yes		250
PNT710477	Yes		64.75
PNT732717	Yes		226
PNT740001	Yes		49.3
PNT742815	Yes		1019
PNT743016	Yes		437.1
PNT743189	Maybe (N)	Agency permission needed Silv Plots	64.7
PNT760002	Yes		36.4
PNT760008	Yes		72.8
PNT760013	Yes		105
PNT764285	Yes	Public wood cutting area	259
PNT780071	Yes		106
PNT780876	Yes		647
PNT801050	Maybe (N)	Agency permission needed/Commercial/ok	44.7
PNT820711	Yes		430
PNT830379	Yes	Public wood cutting area	259
PNT860278	Yes		24
PNT860605	Yes		64.7
PNT870882	Maybe (Y)	Lookout site	89
PNT890215	Yes		268
PNT890311	Yes		0
PNT890462	Maybe (N)	Agency permission needed Industrial ok	183.72
PNT890701	No	Industrial only ok	1127
PNT900137	Yes		511.5
PNT900149	Maybe (Y)	Agency permission needed	189.75
PNT900332	Maybe (N)	Agency permission needed	16.2
PNT910206	Maybe (N)	Agency permission required oil and gas ok	1404
PNT910283	No		129.5
PNT930371	No	Dog Lots	?
PNT940317	Yes		37
PNT950262	Maybe (Y)	Agency Permission required	41.25
PNT960073	No	provincial Park	911
PNT980017	Maybe (N)	Agency permission required	78.87
PNT980130	Maybe (N)	Agency Permission required PSP	0.04
PNT980183	Maybe (N)	Agency Permission required PSP	0.04
PNT000025	Maybe (Y)	Flight path protection	2.84

**Summary of land area associated with PNTs having a ‘No’ or ‘Maybe No’ harvest status.**

<i>PNT</i>	<i>Quarter Section</i>	<i>PNT</i>	<i>Quarter Section</i>	<i>PNT</i>	<i>Quarter Section</i>
<b>PNT010261</b>	408607054	<b>PNT020011</b>	408809224	<b>PNT743189</b>	408508323
<b>PNT010016</b>	408808301		408809271		408508324
	408808302		408809272		408608052
<b>PNT801050</b>	408608101	<b>PNT890462</b>	408509132	<b>PNT890701</b>	408508323
	408608113		408509133		408508324
<b>PNT900332</b>	408807281		408509134		408608052
<b>PNT910206</b>	408807283	<b>PNT910283</b>	408809362	<b>PNT930371</b>	408809234
<b>PNT960073</b>	408607172	<b>PNT980017</b>	408709351		408809243
	408607173		408709353	<b>PNT980130</b>	408715141
	408607181		408709354	<b>PNT980183</b>	408908121
	408607182		408808153		
	408607183		408808164		
	408607184		408808173		
	408607191		408808202		
	408607192				
	408607193				
	408607194				
	408608133				
	408608134				
	408608251				
	408608252				
	408608253				
	408608254				

## Timber Zone 9 (FMU S11)

### Summary of PNTs and associated harvest status.

<i>PNT</i>	<i>Status</i>	<i>Comments</i>	<i>Area (ha)</i>
PNT010374	No	No info	20
PNT920198	No	No info	20

### Summary of land area associated with PNTs having a 'No' or 'Maybe No' harvest status.

<i>NT</i>	<i>Quarter Section</i>	<i>PNT</i>	<i>Quarter Section</i>	<i>PNT</i>	<i>Quarter Section</i>
PNT010374	508804283	PNT920198	508704204		

## Timber Zone 10 (FMUs S12 & S13)

### Summary of PNTs and associated harvest status.

<i>PNT</i>	<i>Status</i>	<i>Comments</i>	<i>Area (ha)</i>
PNT010209	Yes		133
PNT890648	No		65.4
PNT970306	No	recreation and industrial only	388.512
PNT890625	Yes		712.25
PNT910418	No	Oil and gas recreation only	119.79
PNT950073	Yes	Archeological site	64.7

### Summary of land area associated with PNTs having a 'No' or 'Maybe No' harvest status.

<i>NT</i>	<i>Quarter Section</i>	<i>PNT</i>	<i>Quarter Section</i>	<i>PNT</i>	<i>Quarter Section</i>
<b>PNT890648</b>	408322052	<b>PNT910418</b>	409221073	<b>PNT970306</b>	408425011
	408322062		409221182		408425014
	408322063		409221183		
			409222054		
			409222081		
			409222092		
			409222094		
			409222103		
			409222121		
			409222122		
			409222123		
			409222124		
			409222131		
			409222132		
	409222133				
	409222134				

## Timber Zone 11 (FMUs A4, A5, A7 & A8)

### Summary of PNTs and associated harvest status.

<i>PNT</i>	<i>Status</i>	<i>Comments</i>	<i>Area (ha)</i>
PNT980191	Maybe (N)	Agency Permission required PSP	0.04
PNT000214	Maybe (N)	Agency permission needed (Research Plot)	1.2
PNT660001	Yes		76.1
PNT710038	Yes		194
PNT742922	Yes		185
PNT860185	Maybe (Y)	Agency permission needed/Commercial//r ok	275
PNT860186	Maybe (Y)	Agency permission needed/Commercial//r ok	1092
PNT870118	Yes		4402
PNT870360	No	Horse holding area	114.5
PNT910144	No		16.188
PNT950266	Maybe (Y)	Agency Permission required	56.6
PNT980126	Maybe (N)	Agency Permission required PSP	0.04
PNT980186	Maybe (N)	Agency Permission required PSP	0.04
PNT020093	No		0.04
PNT743185	Maybe (Y)	Agency permission needed Seed Prod	2.8
PNT780447	Yes		98
PNT810111	No	Historic site	48.36
PNT850085	Yes		1052
PNT850171	Yes		1710
PNT870097	Maybe (Y)	Agency permission needed	56.66
PNT870326	Maybe (Y)	Agency permission needed	4117
PNT870863	Maybe (Y)	Agency permission needed Commercial//r ok	40.5
PNT890461	No		64.7
PNT890583	Maybe(Y)	Agency permission needed	187.67
PNT900169	Maybe Y)	Agency permission needed	4
PNT920172	No		4
PNT920247	Maybe (N)	Agency permission required PSP	2.25
PNT920248	Maybe (N)	Agency permission required PSP	2.25
PNT940025	No	Oil and gas only	39
PNT970120	No	PSP	0.04
PNT970179	Maybe (N)	Agency permission required arch site	179.5
PNT980125	Maybe (N)	Agency permission required PSP	0.04
PNT980127	Maybe (N)	Agency permission required PSP	0.04
PNT980128	Maybe (N)	Agency Permission required PSP	0.04
PNT980129	Maybe (N)	Agency Permission required PSP	0.04
PNT980131	Maybe (N)	Agency Permission required PSP	0.04
PNT980133	Maybe (N)	Agency Permission required PSP	0.04
PNT980182	Maybe (N)	Agency Permission required PSP	0.04
PNT980184	Maybe (N)	Agency Permission required PSP	0.04
PNT980185	Maybe (N)	Agency Permission required PSP	0.04
PNT980187	Maybe (N)	Agency Permission required PSP	0.04
PNT780510	Yes		518
PNT910121	Maybe (N)	Agency permission required	?
PNT910327	Maybe (N)	Agency permission required Industrial ok	?
PNT980192	Maybe (N)	Agency Permission required PSP	0.04

**Summary of land area associated with PNTs having a ‘No’ or ‘Maybe No’ harvest status.**

<i>PNT</i>	<i>Quarter Section</i>	<i>PNT</i>	<i>Quarter Section</i>	<i>PNT</i>	<i>Quarter Section</i>
<b>PNT980191</b>	417089 1NW	<b>PNT000214</b>	41009013NW	<b>PNT870360</b>	41008928NE
<b>PNT810111</b>	41109336NE	<b>PNT910121</b>	414100 6NW		41008928NW
	411094 1SE		414100 7NW		41008931SE
<b>PNT910327</b>	415099 6NW		414100 7SW		41008932SE
	415099 7NE		41410018SW		41008932SW
	415099 7NW		41509918NW		41008933SW
	415099 7SE		41509918SW	<b>PNT980126</b>	409110214
	415099 7SW		41509919NE	<b>PNT020093</b>	409309083
	416098 4NE		41509919NW		409309084
	416098 8NE		41509919SW	<b>PNT890461</b>	409809164
	416098 8NW		41509929NE		409809211
	416098 8SE		41509929NW	<b>PNT920172</b>	409510104
	416098 8SW		41509929SW	<b>PNT920247</b>	409410011
	416098 9NE		41509930NE	<b>PNT920248</b>	409410014
	416098 9NW		41509930SE	<b>PNT940025</b>	409310281
	416098 9SE		41509930SW		409310282
	416098 9SW		41509932NE	<b>PNT970120</b>	410008122
	41609815NW		41509932NW	<b>PNT970179</b>	409510083
	41609816NE		41509932SE		409510084
	41609816NW		41509932SW		409510171
	41609816SW		41509933SE		409510172
	41609817SE		41509933SW		409510173
	41609817SW		41509934NE		409510174
	41609821NE		41509934NW		409510183
	41609821SE		41509934SW		409510184
	41609821SW		41509935NW	<b>PNT980125</b>	409609113
	41609822NE		415100 1NE	<b>PNT980127</b>	409409052
	41609822NW		415100 1NW	<b>PNT980128</b>	409611073
	41609822SW		415100 1SE	<b>PNT980131</b>	410008121
	41609823NW		415100 1SW	<b>PNT980133</b>	409807321
	41609826NE		415100 2SE	<b>PNT980129</b>	409610212
	41609826NW		415100 2SW	<b>PNT980182</b>	409411324
	41609826SW		415100 3NE	<b>PNT980184</b>	409709223
	41609828NE		415100 3NW	<b>PNT980185</b>	409711194
	41609828NW		415100 3SE	<b>PNT980187</b>	409308092
	41609828SE		415100 4NE	<b>PNT980192</b>	409313321
	41609833NE		415100 4NW	<b>PNT980186</b>	409012241
	41609833NW		415100 5NE		
	41609833SW		415100 5SE		
	41609834NW		41510010SE		
	41609835NE		41510010SW		
	41609835NW		41510011NE		
	41609835SE		41510011NW		
	416099 1NE		41510011SE		

<i>PNT</i>	<i>Quarter Section</i>	<i>PNT</i>	<i>Quarter Section</i>	<i>PNT</i>	<i>Quarter Section</i>
<b>PNT910327</b>	416099 1NW	<b>PNT910121</b>	41510011SW	<b>PNT910121</b>	41609928NE
<b>(con't)</b>	416099 1SE	<b>(con't)</b>	41510012NW	<b>(con't)</b>	41609928NW
	416099 1SW		41510012SE		41609928SE
	416099 2NE		41510013SE		41609928SW
	416099 2NW		41510013SW		41609929NE
	416099 2SE		41510014SE		41609929SE
	416099 2SW		41510015NW		41609932NE
	41609911SE		41510016NE		41609932SE
	41609911SW		41510021NE		41609933NE
	41609912NE		41510021SE		41609933NW
	41609912NW		41510022NE		41609933SE
	41609912SE		41510022NW		41609933SW
	41609912SW		41510022SW		41609934SW
			41510027NE		
			41510027NW		
			41510027SE		
			41510028NE		
			41510028SE		
			41510033SE		
			41510034SE		
			41510034SW		
			41609913NW		
			41609913SE		
			41609913SW		
			41609914NE		
			41609914NW		
			41609915NE		
			41609921NE		
			41609922NE		
			41609922NW		
			41609922SE		
			41609922SW		
			41609923SW		
			41609924NE		
			41609925NE		
			41609925NW		
			41609925SE		
			41609925SW		
			41609926NE		
			41609926NW		
			41609926SE		
			41609926SW		
			41609927NE		
			41609927NW		
			41609927SE		





ALBERTA  
PACIFIC

FOREST INDUSTRIES INC

---

---

**Appendix V: Isolated Stand Analysis Example**

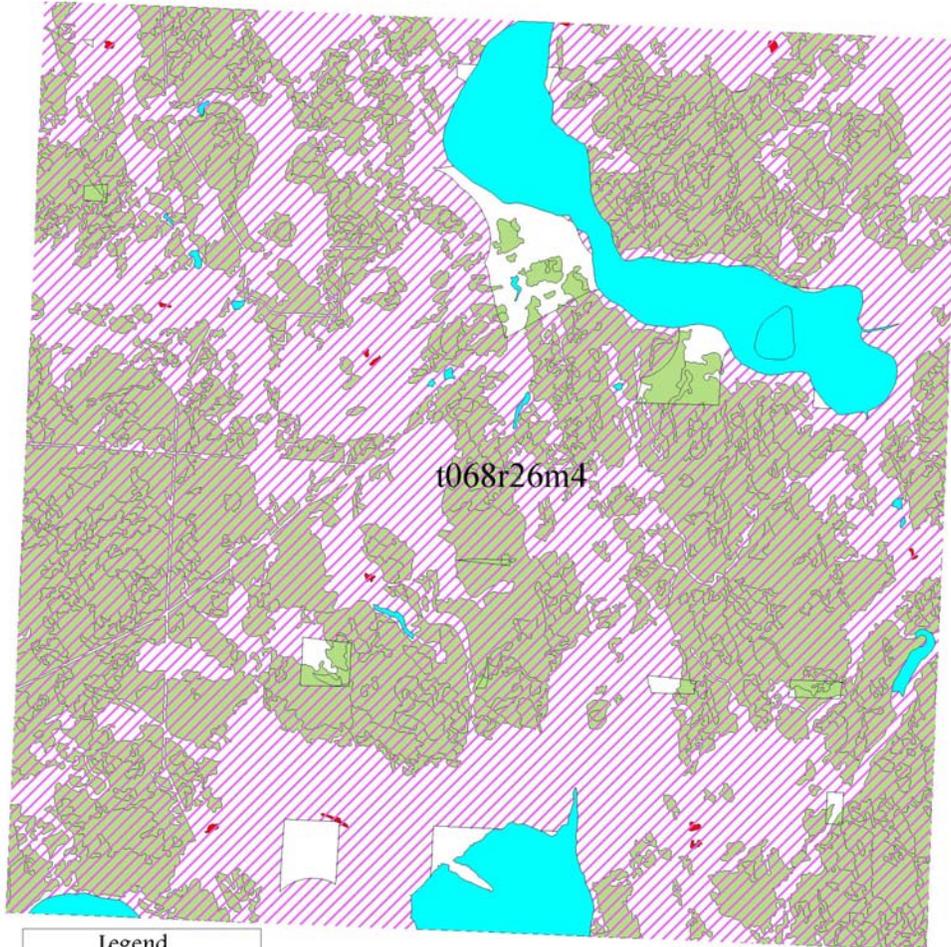
---

---



# Isolated Stand Analysis

75m Adjacency, 500m Proximity



Legend	
	Non-Isolated Stands
	Isolated Stands
	Road and Oil Buffers

### Isolated Stand Criteria

1. Stands within 500m of roads, seismic, and/or cut lines.
  - a. Total area must be greater than 1 ha when combined with adjacent stands (adjacency distance 75m).
  - b. For areas less than 1 ha, total area including surrounding productive stands within 1km must be greater than 5 ha.
2. Stands beyond 500m of roads, seismic, and/or cut lines.
  - a. Total area must be greater than 2 ha when combined with adjacent stands (adjacency distance 75m).





**ALBERTA  
PACIFIC**

**FOREST INDUSTRIES INC**

---

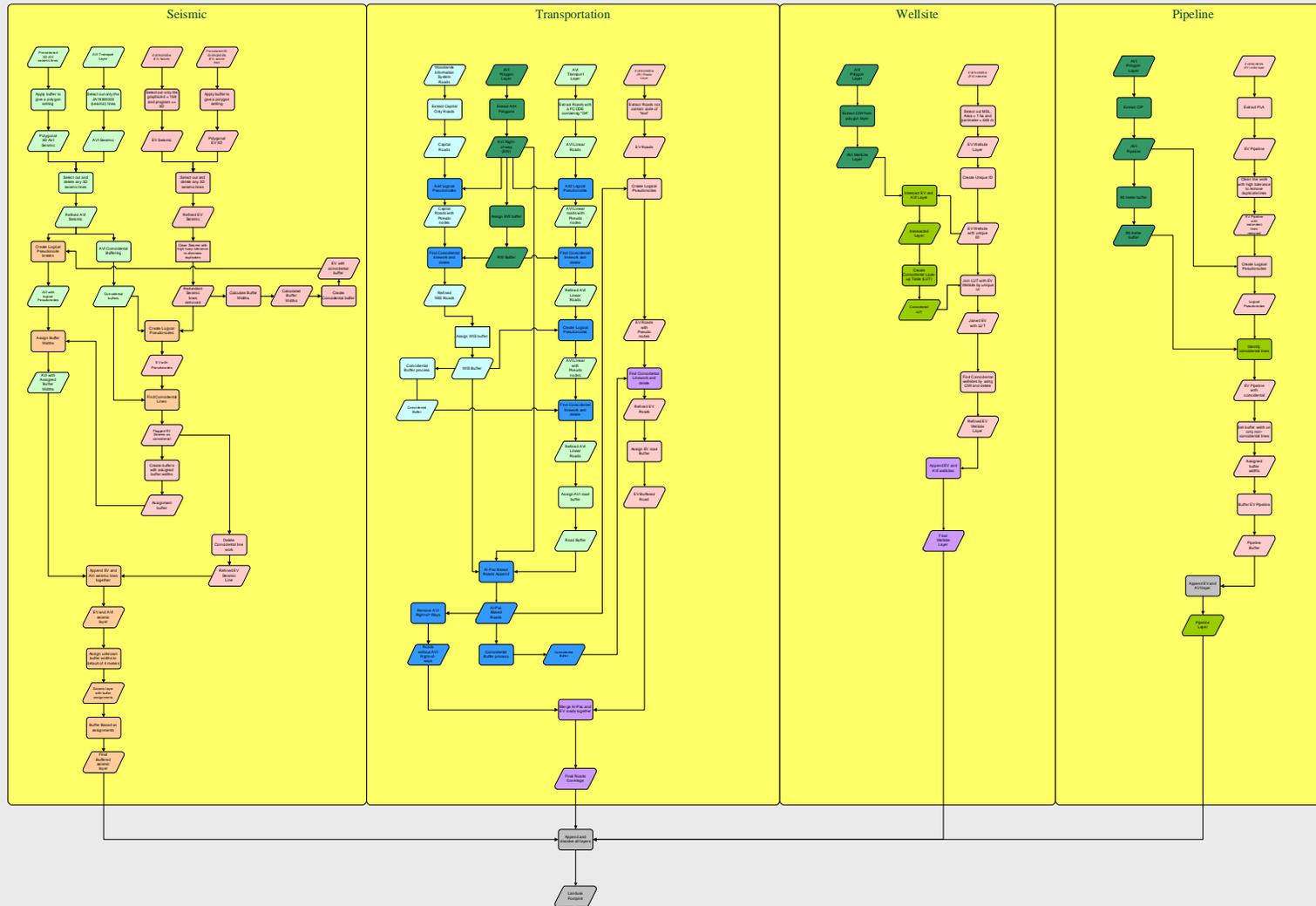
---

**Appendix VI: Oil and Gas Documentation**

---

---

# Landuse Footprint Process



-WIS Road 40 meter right-of-way  
 -AVI Road 20 meter right-of-way  
 -Evergreen Road 10 meter right-of-way  
 -Setback: width based on setback, otherwise default to 8 meters width  
 -Evergreen Pipelines 20 meters right-of-way



ALBERTA  
PACIFIC

FOREST INDUSTRIES INC

---

---

**Appendix VII: Millar Western Regenerated Stand Inventory Documentation**

---

---

## 1 RSI Development Overview

Millar Western Forest Products is a coniferous quota holder in L3 and as such is interested in the condition of the conifer harvest blocks. The harvesting history in L3 has generated large amounts of cutovers thus elevating regenerated conifer cutblock condition a significant issue for Millar Western. As a recent quota holder, Millar Western had no inventory that described cutblock condition across the FMA in a form that was suitable to determine growth trajectory and prescribe potential treatments. Alberta Vegetation Inventory (AVI) format was not designed to address regenerated stand condition under about 20 years of age. To address this deficiency, in 1997, Millar Western developed a Regenerated Stand Inventory (RSI) program.

The RSI was designed to provide detailed polygon specific information on cutovers that could be used to describe the current condition, replace or update the AVI polygons and be used to generate appropriate follow-up silviculture treatments. Formalized protocols using AVI certified interpreters were used to maintain AVI consistency and data integrity. The RSI protocol was applied to all cutover blocks harvested in 1994 or earlier in L3J (approximately 16,800 ha) and in the Clearwater River operating area (approximately 3,200 ha).

The process began with stratification of cutover areas into homogenous polygons using AVI standards with the exception that a one hectare minimum polygon size was used. Following the stratification process certified AVI interpreters aircalled each polygon from a helicopter to assign AVI type attributes. The use of aircalls for every polygon addressed the AVI weakness in regenerated stands. A greater accuracy in species, heights and stocking can be determined from aircalls compared to AVI photo-interpretation. Additional information such as stems per hectare ranges, free-to-grow status and four layers were attributed.

Final steps involved digital loading of the spatial and attribute strings, the assignment of SRMS block information and followed by field checks to verify accuracy. A final coverage of the RSI updated areas was created for later incorporation into AVI.

## 2 Overview of RSI Application in L3 Timber Supply

Regenerated Stand Inventory provides greater accuracy and more up to date information on cutover areas than the L3 AVI. This superior information was incorporated as part of a process to assign strata and age to regenerated conifer areas within the L3J timber supply process. The final phases of the RSI was completed in June of 2001, but the interpretation was completed in the winter of 1998/99. Therefore, up to 4 summers of silvicultural treatments were potentially applied after the RSI interpretation was completed. To capture the impacts of these treatments, information from Millar

Western's Silviculture Information System (SIS) was used to update affected areas. The general rule for incorporating the 2 data sets was that RSI information was used to assign timber supply strata to harvested areas and these strata were modified by a series of rules based on SIS data where treatments were applied after the RSI date (Figure 1).additional

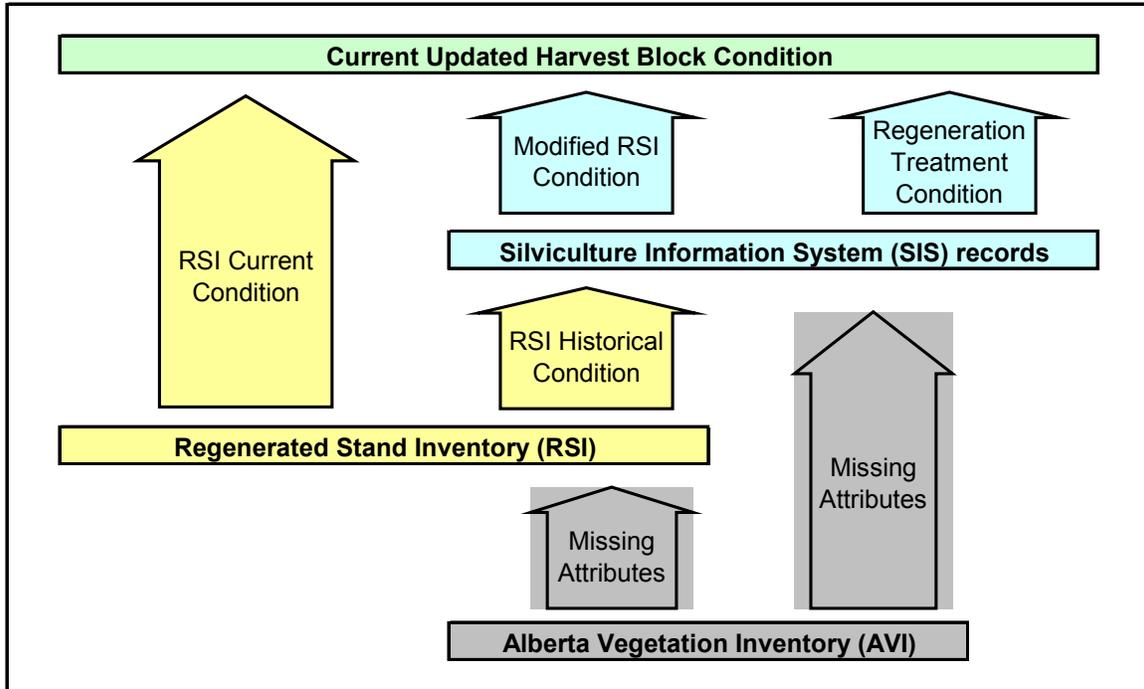


Figure 1. AVI, RSI and SIS data use and integration flow chart.

The line work used to describe the current condition of harvested areas was derived from both RSI and SIS data. AVI information was used to fill missing attribute information such as TPR or pre-harvest species. The end result was that harvested areas could be defined from 3 possible data sources or combinations of sources. Straight RSI, straight SIS, or a combination of RSI modified with SIS. The RSI and SIS data was merged into a single coverage describing the conifer harvest blocks. The resulting coverage was cut into the landbase netdown coverage in a later and separate process. The general rule for landbase creation was RSI replaced AVI and SIS both modified RSI and replaced AVI information. Details on the conifer harvest block update process can be found in [Harvest Block Update Process](#), The Forestry Corp., June 7, 2002.

*Prepared by: Ted Gooding – Forestry Corp – January 2003*

J:\P312\_L3\report\RSI Use in L3 Timber Supply Jan10-03.doc





**ALBERTA  
PACIFIC**

**FOREST INDUSTRIES INC**

---

---

**Appendix VIII : Results of Sliver Removal Process**

---

---

## Sliver polygon removal polygon statistics

Table Index	A14J FMU	Before Sliver Removal		After Sliver Removal		% Difference	
		Count (#)	Area (ha)	Count (#)	Area (ha)	Count (#)	Area (ha)
	1 Polygon Statistics						
1.a	Polygon Count	281,712	973,774	205,101	973,774	-27.19%	na
1.b	Average Area	na	54.17	na	69.84	na	28.94%
1.c	Polygon Area Classes						
1.c1	0 – 1	162,479	31,369	85,568	30,082	47.34%	4.10%
1.c2	1 – 5	72,318	184,289	72,542	184,710	-0.31%	-0.23%
1.c3	5 – 10	24,812	174,064	24,864	174,420	-0.21%	-0.20%
1.c4	10 – 25	15,959	242,291	15,978	242,581	-0.12%	-0.12%
1.c5	25 – 50	4,225	144,073	4,229	144,211	-0.09%	-0.10%
1.c6	50 – 100	1,374	92,242	1,375	92,314	-0.07%	-0.08%
1.c7	> 100	545	105,446	545	105,457	0.00%	-0.01%
	Sub-section-total	<b>281,712</b>	<b>973,774</b>	<b>205,101</b>	<b>973,774</b>	<b>27.19%</b>	<b>0.00%</b>
	2 Area By Broad Cover Group						
2.a	Deciduous	49,185	163,711	36,319	163,730	26.16%	-0.01%
2.b	Deciduous / Coniferous	8,837	22,959	6,465	22,956	26.84%	0.01%
2.c	Coniferous / Deciduous	7,780	19,472	5,602	19,468	27.99%	0.02%
2.d	Coniferous	162,071	625,318	123,300	625,291	23.92%	0.00%
2.e	<b>Non-Forested</b>	53,839	142,313	33,415	142,329	37.94%	-0.01%
	Section-total	<b>281,712</b>	<b>973,774</b>	<b>205,101</b>	<b>973,774</b>	<b>27.19%</b>	<b>0.00%</b>

## Sliver polygon removal polygon statistics

Table Index	A5J FMU	Before Sliver Removal		After Sliver Removal		% Difference	
		Count (#)	Area (ha)	Count (#)	Area (ha)	Count (#)	Area (ha)
1 Polygon Statistics							
1.a	Polygon Count	342,912	1,139,773	259,352	1,139,773	-24.37%	na
1.b	Average Area	na	51	na	66	na	29.81%
1.c	Polygon Area Classes						
1.c1	0 – 1	189,921	42,854	105,959	41,320	-44.21%	-3.58%
1.c2	1 – 5	99,312	245,951	99,658	246,668	0.35%	0.29%
1.c3	5 – 10	29,059	202,967	29,082	203,141	0.08%	0.09%
1.c4	10 – 25	18,034	271,306	18,061	271,685	0.15%	0.14%
1.c5	25 – 50	4,467	151,542	4,473	151,757	0.13%	0.14%
1.c6	50 – 100	1,498	101,384	1,498	101,408	0.00%	0.02%
1.c7	> 100	621	123,769	621	123,794	0.00%	0.02%
Sub-section-total		<b>342,912</b>	<b>1,139,773</b>	<b>259,352</b>	<b>1,139,773</b>	<b>-24.37%</b>	<b>0.00%</b>
2 Area By Broad Cover Group							
2.a	Deciduous	77,525	266,369	58,527	266,403	-24.51%	0.01%
2.b	Deciduous / Coniferous	11,810	31,385	9,105	31,381	-22.90%	-0.01%
2.c	Coniferous / Deciduous	10,255	26,562	7,771	26,560	-24.22%	-0.01%
2.d	Coniferous	187,348	647,052	145,260	647,011	-22.47%	-0.01%
2.e	<i>Non-Forested</i>	55,904	168,402	38,646	168,415	-30.87%	0.01%
Section-total		<b>342,842</b>	<b>1,139,769</b>	<b>259,309</b>	<b>1,139,769</b>	<b>-24.36%</b>	<b>0.00%</b>

## Sliver polygon removal polygon statistics

Table Index	S7J FMU	Before Sliver		After Sliver		% Difference	
		Removal		Removal			
		Count (#)	Area (ha)	Count (#)	Area (ha)	Count (#)	Area (ha)
1 Polygon Statistics							
1.a	Polygon Count	215,271	334,065	131,022	334,065	-39.14%	na
1.b	Average Area	na	9.97	na	14.43	na	44.68%
1.c	Polygon Area Classes						
1.c1	0 – 1	153,594	27,077	69,123	26,285	-55.00%	2.93%
1.c2	1 – 5	45,921	106,191	46,104	106,576	-0.40%	-0.36%
1.c3	5 – 10	9,625	66,828	9,653	67,025	-0.29%	-0.29%
1.c4	10 – 25	4,940	73,045	4,949	73,179	-0.18%	-0.18%
1.c5	25 – 50	922	30,608	924	30,676	-0.22%	-0.22%
1.c6	50 – 100	211	14,281	211	14,286	0.00%	-0.04%
1.c7	> 100	58	16,034	58	16,037	0.00%	-0.02%
Sub-section-total		<b>215,271</b>	<b>334,065</b>	<b>131,022</b>	<b>334,065</b>	<b>-39.14%</b>	<b>0.00%</b>
2 Area By Broad Cover Group							
2.a	Deciduous	50,406	75,493	30,361	75,520	-39.77%	0.04%
2.b	Deciduous / Coniferous	7,495	8,592	4,237	8,586	-43.47%	-0.07%
2.c	Coniferous / Deciduous	6,645	7,372	3,748	7,366	-43.60%	-0.08%
2.d	Coniferous	119,928	181,845	73,490	181,805	-38.72%	-0.02%
2.e	<b>Non-Forested</b>	30,797	60,763	19,186	60,788	-37.70%	0.04%
Section-total		<b>215,271</b>	<b>334,065</b>	<b>131,022</b>	<b>334,065</b>	<b>-39.14%</b>	<b>0.00%</b>

## Sliver polygon removal polygon statistics

Table Index	L2J FMU	Before Sliver		After Sliver		% Difference	
		Removal		Removal			
		Count (#)	Area (ha)	Count (#)	Area (ha)	Count (#)	Area (ha)
1 Polygon Statistics							
1.a	Polygon Count	237,080	303,715	119,803	303,715	-49.47%	na
1.b	Average Area	na	6.89	na	12.04	na	74.66%
1.c	Polygon Area Classes						
1.c1	0 – 1	183,844	24,427	66,313	23,540	-63.93%	-3.63%
1.c2	1 – 5	38,937	90,164	39,149	90,584	0.54%	0.47%
1.c3	5 – 10	8,744	61,004	8,775	61,233	0.35%	0.38%
1.c4	10 – 25	4,470	65,917	4,481	66,118	0.25%	0.30%
1.c5	25 – 50	832	27,927	832	27,951	0.00%	0.09%
1.c6	50 – 100	206	13,237	206	13,245	0.00%	0.06%
1.c7	> 100	47	21,040	47	21,043	0.00%	0.01%
Sub-section-total		<b>237,080</b>	<b>303,715</b>	<b>119,803</b>	<b>303,715</b>	<b>-49.47%</b>	<b>0.00%</b>
2 Area By Broad Cover Group							
2.a	Deciduous	72,625	74,967	33,497	74,974	-53.88%	0.01%
2.b	Deciduous / Coniferous	11,678	9,856	4,790	9,856	-58.98%	0.00%
2.c	Coniferous / Deciduous	13,642	11,000	5,309	11,000	-61.08%	0.01%
2.d	Coniferous	108,051	151,009	59,807	150,999	-44.65%	-0.01%
2.e	<b>Non-Forested</b>	31,084	56,884	16,400	56,886	-47.24%	0.00%
Section-total		<b>237,080</b>	<b>303,715</b>	<b>119,803</b>	<b>303,715</b>	<b>-49.47%</b>	<b>0.00%</b>

## Sliver polygon removal polygon statistics

Table Index	L3J FMU	Before Sliver		After Sliver		% Difference	
		Removal		Removal			
		Count (#)	Area (ha)	Count (#)	Area (ha)	Count (#)	Area (ha)
1 Polygon Statistics							
1.a	Polygon Count	408,914	588,573	212,670	588,573	-47.99%	na
1.b	Average Area	na	8.72	na	15.26	na	74.99%
1.c	Polygon Area Classes						
1.c1	0 – 1	311,636	41,537	114,980	40,046	-63.10%	-3.59%
1.c2	1 – 5	69,280	162,038	69,623	162,727	0.50%	0.43%
1.c3	5 – 10	15,976	111,329	16,018	111,628	0.26%	0.27%
1.c4	10 – 25	9,202	137,795	9,224	138,107	0.24%	0.23%
1.c5	25 – 50	2,066	69,646	2,068	69,667	0.10%	0.03%
1.c6	50 – 100	575	37,695	578	37,858	0.52%	0.43%
1.c7	> 100	179	28,535	179	28,540	0.00%	0.02%
Sub-section-total		<b>408,914</b>	<b>588,573</b>	<b>212,670</b>	<b>588,573</b>	<b>-47.99%</b>	<b>0.00%</b>
2 Area By Broad Cover Group							
2.a	Deciduous	75,401	62,723	27,678	62,719	-63.29%	-0.01%
2.b	Deciduous / Coniferous	23,687	18,523	9,241	18,516	-60.99%	-0.03%
2.c	Coniferous / Deciduous	20,747	18,476	8,323	18,481	-59.88%	0.03%
2.d	Coniferous	227,278	409,718	137,625	409,713	-39.45%	0.00%
2.e	<i>Non-Forested</i>	61,801	79,134	29,803	79,145	-51.78%	0.01%
Section-total		<b>408,914</b>	<b>588,573</b>	<b>212,670</b>	<b>588,573</b>	<b>-47.99%</b>	<b>0.00%</b>

## Sliver polygon removal polygon statistics

Table Index	L8J FMU	Before Sliver		After Sliver		% Difference	
		Removal		Removal			
		Count (#)	Area (ha)	Count (#)	Area (ha)	Count (#)	Area (ha)
1 Polygon Statistics							
1.a	Polygon Count	59,594	126,136	40,697	126,136	-31.71%	na
1.b	Average Area	na	4.20	na	6.15	na	46.44%
1.c	Polygon Area Classes						
1.c1	0 – 1	39,403	7,161	20,452	6,920	-48.10%	-3.36%
1.c2	1 – 5	13,602	33,165	13,636	33,221	0.25%	0.17%
1.c3	5 – 10	3,775	26,317	3,793	26,439	0.48%	0.46%
1.c4	10 – 25	2,237	33,303	2,238	33,328	0.04%	0.08%
1.c5	25 – 50	441	14,636	441	14,620	0.00%	-0.11%
1.c6	50 – 100	110	7,182	111	7,235	0.91%	0.73%
1.c7	> 100	26	4,372	26	4,373	0.00%	0.02%
Sub-section-total		<b>59,594</b>	<b>126,136</b>	<b>40,697</b>	<b>126,136</b>	<b>-31.71%</b>	<b>0.00%</b>
2 Area By Broad Cover Group							
2.a	Deciduous	14,338	30,120	9,537	30,124	-33.48%	0.01%
2.b	Deciduous / Coniferous	1,573	2,506	1,125	2,506	-28.48%	-0.01%
2.c	Coniferous / Deciduous	1,281	2,444	930	2,444	-27.40%	0.02%
2.d	Coniferous	30,665	70,141	22,242	70,136	-27.47%	-0.01%
2.e	<b>Non-Forested</b>	11,737	20,925	6,863	20,925	-41.53%	0.00%
Section-total		<b>59,594</b>	<b>126,136</b>	<b>40,697</b>	<b>126,136</b>	<b>-31.71%</b>	<b>0.00%</b>

## Sliver polygon removal polygon statistics

Table Index	L11J FMU	Before Sliver		After Sliver		% Difference	
		Removal		Removal			
		Count (#)	Area (ha)	Count (#)	Area (ha)	Count (#)	Area (ha)
	1 Polygon Statistics						
1.a	Polygon Count	570,818	1,047,763	376,725	1,047,763	-34.00%	na
1.b	Average Area	32	32.33	47	47.10	na	45.66%
1.c	Polygon Area Classes						
1.c1	0 – 1	386,852	73,610	192,107	71,171	-50.34%	-3.31%
1.c2	1 – 5	134,372	314,183	134,892	315,256	0.39%	0.34%
1.c3	5 – 10	29,616	205,668	29,702	206,213	0.29%	0.27%
1.c4	10 – 25	15,532	230,524	15,572	231,090	0.26%	0.25%
1.c5	25 – 50	3,278	110,797	3280	110,819	0.06%	0.02%
1.c6	50 – 100	939	61,317	943	61,541	0.43%	0.37%
1.c7	> 100	229	51,663	229	51,673	0.00%	0.02%
	<b>Sub-section-total</b>	<b>570,818</b>	<b>1,047,763</b>	<b>376,725</b>	<b>1,047,763</b>	<b>-34.00%</b>	<b>0.00%</b>
	2 Area By Broad Cover Group						
2.a	Deciduous	106,731	174,616	68,351	174,678	-35.96%	0.04%
2.b	Deciduous / Coniferous	14,916	18,151	9,844	18,137	-34.00%	-0.08%
2.c	Coniferous / Deciduous	10,534	11,893	6,531	11,884	-38.00%	-0.07%
2.d	Coniferous	354,558	673,923	239,924	673,854	-32.33%	-0.01%
2.e	<b>Non-Forested</b>	84,079	169,180	52,075	169,209	-38.06%	0.02%
	<b>Section-total</b>	<b>570,818</b>	<b>1,047,763</b>	<b>376,725</b>	<b>1,047,763</b>	<b>-34.00%</b>	<b>0.00%</b>

## Sliver polygon removal polygon statistics

Table Index	S7J FMU	Before Sliver Removal		After Sliver Removal		% Difference	
		Count (#)	Area (ha)	Count (#)	Area (ha)	Count (#)	Area (ha)
1 Polygon Statistics							
1.a	Polygon Count	106,833	112,895	57,010	112,895	-46.64%	na
1.b	Average Area	na	1.06	na	1.98	na	87.39%
1.c	Polygon Area Classes						
1.c1	0 – 1	84,295	12,419	34,324	11,935	-59.28%	-3.90%
1.c2	1 – 5	17,373	39,401	17,496	39,643	0.71%	0.62%
1.c3	5 – 10	3,348	23,201	3,366	23,320	0.54%	0.51%
1.c4	10 – 25	1,505	21,787	1,510	21,850	0.33%	0.29%
1.c5	25 – 50	255	8,443	256	8,451	0.39%	0.10%
1.c6	50 – 100	41	2,704	42	2,756	2.44%	1.91%
1.c7	> 100	16	4,939	16	4,940	0.00%	0.01%
Sub-section-total		<b>106,833</b>	<b>112,895</b>	<b>57,010</b>	<b>112,895</b>	<b>-46.64%</b>	<b>0.00%</b>
2 Area By Broad Cover Group							
2.a	Deciduous	42,309	45,709	21,100	45,747	-50.13%	0.08%
2.b	Deciduous / Coniferous	4,359	3,783	2,113	3,783	-51.53%	0.00%
2.c	Coniferous / Deciduous	4,937	3,401	2,316	3,403	-53.09%	0.03%
2.d	Coniferous	40,757	41,073	23,200	41,047	-43.08%	-0.06%
2.e	<i>Non-Forested</i>	14,471	18,929	8,281	18,915	-42.78%	-0.07%
Section-total		<b>106,833</b>	<b>112,895</b>	<b>57,010</b>	<b>112,895</b>	<b>-46.64%</b>	<b>0.00%</b>

## Sliver polygon removal polygon statistics

Table Index	S11J FMU	Before Sliver		After Sliver		% Difference	
		Removal		Removal			
		Count (#)	Area (ha)	Count (#)	Area (ha)	Count (#)	Area (ha)
1 Polygon Statistics							
1.a	Polygon Count	228,635	332,548	154,945	332,548	-32.23%	na
1.b	Average Area	na	8.39	na	12.26	na	46.14%
1.c	Polygon Area Classes						
1.c1	0 – 1	161,547	32,024	87,577	31,058	45.79%	3.02%
1.c2	1 – 5	52,160	119,771	52,393	120,275	-0.45%	-0.42%
1.c3	5 – 10	9,886	68,004	9,922	68,256	-0.36%	-0.37%
1.c4	10 – 25	4,264	61,877	4,273	62,015	-0.21%	-0.22%
1.c5	25 – 50	606	20,089	607	20,106	-0.17%	-0.08%
1.c6	50 – 100	125	8,328	126	8,382	-0.80%	-0.65%
1.c7	> 100	47	22,456	47	22,456	0.00%	0.00%
Sub-section-total		<b>228,635</b>	<b>332,548</b>	<b>154,945</b>	<b>332,548</b>	<b>32.23%</b>	<b>0.00%</b>
2 Area By Broad Cover Group							
2.a	Deciduous	59,687	91,561	40,692	91,624	31.82%	-0.07%
2.b	Deciduous / Coniferous	10,011	13,102	6,950	13,103	30.58%	-0.01%
2.c	Coniferous / Deciduous	6,881	9,408	4,854	9,410	29.46%	-0.02%
2.d	Coniferous	122,621	158,174	84,102	158,126	31.41%	0.03%
2.e	<i>No Spl</i>	29,435	60,302	18,347	60,285	37.67%	0.03%
Section-total		<b>228,635</b>	<b>332,548</b>	<b>154,945</b>	<b>332,548</b>	<b>32.23%</b>	<b>0.00%</b>

## Sliver polygon removal polygon statistics

Table Index	S18J FMU	Before Sliver Removal		After Sliver Removal		% Difference	
		Count (#)	Area (ha)	Count (#)	Area (ha)	Count (#)	Area (ha)
1 Polygon Statistics							
1.a	Polygon Count	259,760	538,138	149,305	538,138	-42.52%	na
1.b	Average Area	na	10.82	na	18.11	na	67.31%
1.c Polygon Area Classes							
1.c1	0 – 1	184,729	26,327	74,055	25,398	-59.91%	-3.53%
1.c2	1 – 5	49,287	120,075	49,461	120,438	0.35%	0.30%
1.c3	5 – 10	14,222	99,859	14,245	100,018	0.16%	0.16%
1.c4	10 – 25	8,536	128,686	8,555	128,963	0.22%	0.21%
1.c5	25 – 50	2,077	70,952	2,078	70,961	0.05%	0.01%
1.c6	50 – 100	694	46,706	696	46,821	0.29%	0.25%
1.c7	> 100	215	45,533	215	45,539	0.00%	0.01%
Sub-section-total		<b>259,760</b>	<b>538,138</b>	<b>149,305</b>	<b>538,138</b>	<b>-42.52%</b>	<b>0.00%</b>
2 Area By Broad Cover Group							
2.a	Deciduous	72,304	125,689	40,838	125,707	-43.52%	0.01%
2.b	Deciduous / Coniferous	14,092	19,814	7,338	19,814	-47.93%	0.00%
2.c	Coniferous / Deciduous	16,134	20,141	7,398	20,142	-54.15%	0.01%
2.d	Coniferous	114,622	280,628	70,792	280,626	-38.24%	0.00%
2.e	<b>Non-Forested</b>	42,608	91,863	22,939	91,846	-46.16%	-0.02%
Section-total		<b>259,760</b>	<b>538,136</b>	<b>149,305</b>	<b>538,136</b>	<b>-42.52%</b>	<b>0.00%</b>

Dec12, 2:05

## Sliver polygon removal polygon statistics

Table Index	S12-S13J FMU	Before Sliver		After Sliver		% Difference	
		Removal		Removal			
		Count (#)	Area (ha)	Count (#)	Area (ha)	Count (#)	Area (ha)
1 Polygon Statistics							
1.a	Polygon Count	293,508	803,548	220,679	803,548	-24.81%	na
1.b	Average Area	na	2.74	na	3.64	na	33.00%
1.c	Polygon Area Classes						
1.c1	0 – 1	172,985	38,362	99,877	37,230	-42.26%	-2.95%
1.c2	1 – 5	82,104	197,810	82,319	198,240	0.26%	0.22%
1.c3	5 – 10	21,081	147,014	21,122	147,264	0.19%	0.17%
1.c4	10 – 25	12,780	193,154	12,799	193,421	0.15%	0.14%
1.c5	25 – 50	3,286	111,690	3,289	111,791	0.09%	0.09%
1.c6	50 – 100	985	66,202	986	66,276	0.10%	0.11%
1.c7	> 100	287	49,316	287	49,326	0.00%	0.02%
Sub-section-total		<b>293,508</b>	<b>803,548</b>	<b>220,679</b>	<b>803,548</b>	<b>-24.81%</b>	<b>0.00%</b>
2 Area By Broad Cover Group							
2.a	Deciduous	69,301	195,474	53,133	195,525	-23.33%	0.03%
2.b	Deciduous / Coniferous	8,281	17,721	6,530	17,716	-21.14%	-0.03%
2.c	Coniferous / Deciduous	6,061	12,249	4,752	12,247	-21.60%	-0.01%
2.d	Coniferous	162,763	462,368	124,415	462,326	-23.56%	-0.01%
2.e	<i>Non-Forested</i>	47,102	115,736	31,849	115,733	-32.38%	0.00%
Section-total		<b>293,508</b>	<b>803,548</b>	<b>220,679</b>	<b>803,548</b>	<b>-24.81%</b>	<b>0.00%</b>



**ALBERTA  
PACIFIC**

**FOREST INDUSTRIES INC**

---

---

**Appendix IX: AVI Netdown Database Data Dictionary**

---

---

	<b>2007 AVI Netdown Database (Version 3.0)</b>	<b>Database Name</b>	
		FMU_gis	

<b>Originator:</b>	Created by Timberline Forest Inventory Consultants.		
<b>Point of Contact:</b>	For further information contact	Jeff Christiansen	Timberline Forest Inventory Consultants. Phone: (780) 425-8826 Dave Cheyne Alberta-Pacific Forest Industries Inc Phone: (780) 525-8261
<b>Format of Data</b>	Arc Info / Visual Fox Pro		

<b>Description</b>	
<b>Theme</b>	Alberta Vegetation Inventory (AVI) Attribute Data; 2007 Netdown
<b>Keywords:</b>	Attributes
<b>Abstract:</b>	The AVI attribute data describes the contents of the AVI forest polygons captured through photo interpretation and field checks. Also incorporated is the additional information integrated throughout the 2007 netdown process.
<b>Purpose:</b>	To provide a complete data directory structure.
<b>Supplemental Info:</b>	Information presented in these tables are directly associated with Alberta Pacific's 2007 netdown document.
<b>Cross Reference:</b>	Database contains several of the AVI items as well as other redefined items required in the netdown procedure.
<b>Place</b>	Alberta-Pacific Forest Industries Inc. Timberline Forest Inventory
<b>Keywords:</b>	Consultants; Forest Management Area (FMA); 2007 netdown.

**Entity and Attribute Information**

<b>Table Index</b>	<b>Defined Item Name</b>	<b>Type</b>	<b>Width</b>	<b>Decimal</b>
1	AREA	Numeric	20	5
2	LINK_KEY	Numeric	11	0
3	POLY_NUM	Numeric	10	0
4	AP_OPER	Character	10	0
5	FMUJ	Character	4	0
6	PNT	Character	80	0
7	HARVESTABL	Character	3	0
8	PNT1	Character	12	0
9	HARV1	Character	12	0
10	PNT2	Character	12	0
11	HARV2	Character	12	0
12	PNT3	Character	12	0
13	HARV3	Character	12	0
14	PROTECT	Character	6	0
15	NSR	Character	4	0
16	PUNUM	Character	6	0
17	ENTRYYEAR	Numeric	4	0
18	TLE	Character	25	0
19	FIRESMT	Character	20	0
20	BENCH	Character	100	0
21	MOSA	Character	3	0
22	OIL_AP	Character	9	0
23	OIL_GOV	Character	3	0
24	WBUF	Numeric	2	0
25	OIL	Character	3	0
26	PRI_LND	Character	3	0
27	PER_PRI	Numeric	6	2
28	IRP	Character	3	0
29	PSP	Character	3	0
30	SLOPE	Character	5	0
31	FIRE	Character	5	0
32	FIRE_YEAR	Numeric	4	0
33	MOF	Character	3	0
34	GRAZING	Character	5	0
35	ABO_RES	Character	5	0
36	ECO_RES	Character	5	0
37	PARK	Character	3	0
38	CARIBOU	Character	10	0
39	MOOSE	Character	10	0
40	SEASON	Character	3	0
41	Q_CC_LB	Character	2	0
42	Q_CC_YR	Numeric	4	0

<b>Table Index</b>	<b>Defined Item Name</b>	<b>Type</b>	<b>Width</b>	<b>Decimal</b>
43	Q_OPU	Character	16	0
44	SOURCE	Character	15	0
45	YEAR_CUT	Numeric	4	0
46	RSTRATA	Character	10	0
47	G_CC_LB	Character	3	0
48	G_CC_YR	Numeric	4	0
49	AVI_YR	Numeric	4	0
50	AVI_LB	Character	4	0
51	F	Character	2	0
52	MU	Numeric	2	0
53	MGR	Character	2	0
54	OPUNIT	Character	2	0
55	MOIST_REG	Character	1	0
56	DENSITY	Character	1	0
57	HEIGHT	Numeric	2	0
58	SP1	Character	2	0
59	SP1_PER	Numeric	2	0
60	SP2	Character	2	0
61	SP2_PER	Numeric	2	0
62	SP3	Character	2	0
63	SP3_PER	Numeric	2	0
64	SP4	Character	2	0
65	SP4_PER	Numeric	2	0
66	SP5	Character	2	0
67	SP5_PER	Numeric	2	0
68	STRUC	Character	1	0
69	STRUC_VAL	Numeric	2	0
70	ORIGIN	Numeric	4	0
71	TPR	Character	1	0
72	INITIALS	Character	2	0
73	NFL	Character	3	0
74	NFL_PER	Numeric	2	0
75	NAT_NON	Character	3	0
76	ANTH_VEG	Character	3	0
77	ANTH_NON	Character	3	0
78	MOD1	Character	2	0
79	MOD1_EXT	Numeric	1	0
80	MOD1_YR	Numeric	4	0
81	MOD2	Character	2	0
82	MOD2_EXT	Numeric	1	0
83	MOD2_YR	Numeric	4	0
84	DATA	Character	1	0
85	DATA_YR	Numeric	4	0
86	UMOIST_REG	Character	1	0
87	UDENSITY	Character	1	0

<b>Table Index</b>	<b>Defined Item Name</b>	<b>Type</b>	<b>Width</b>	<b>Decimal</b>
88	UHEIGHT	Numeric	2	0
89	USP1	Character	2	0
90	USP1_PER	Numeric	2	0
91	USP2	Character	2	0
92	USP2_PER	Numeric	2	0
93	USP3	Character	2	0
94	USP3_PER	Numeric	2	0
95	USP4	Character	2	0
96	USP4_PER	Numeric	2	0
97	USP5	Character	2	0
98	USP5_PER	Numeric	2	0
99	USTRUC	Character	1	0
100	USTRUC_VAL	Numeric	2	0
101	UORIGIN	Numeric	4	0
102	UTPR	Character	1	0
103	UINITIALS	Character	2	0
104	UNFL	Character	3	0
105	UNFL_PER	Numeric	2	0
106	UNAT_NON	Character	3	0
107	UANTH_VEG	Character	3	0
108	UANTH_NON	Character	3	0
109	UMOD1	Character	2	0
110	UMOD1_EXT	Numeric	1	0
111	UMOD1_YR	Numeric	4	0
112	UMOD2	Character	2	0
113	UMOD2_EXT	Numeric	1	0
114	UMOD2_YR	Numeric	4	0
115	UDATA	Character	1	0
116	UDATA_YR	Numeric	4	0
117	FMU	Character	6	0
118	DENSITY_PE	Numeric	3	0
119	DECIMAL_HT	Numeric	2	0
120	STEMS_HA	Numeric	5	0
121	MOIST_CODE	Numeric	2	0
122	MOD3	Character	2	0
123	MOD3_EXT	Numeric	2	0
124	MOD3_YR	Numeric	4	0
125	INT_TPR	Character	1	0
126	UDENSITY_P	Numeric	3	0
127	UDECIMAL_H	Numeric	2	0
128	USTEMS_HA	Numeric	5	0
129	UMOIST_COD	Numeric	2	0
130	UMOD3	Character	2	0
131	UMOD3_EXT	Numeric	2	0
132	UMOD3_YR	Numeric	4	0

<b>Table Index</b>	<b>Defined Item Name</b>	<b>Type</b>	<b>Width</b>	<b>Decimal</b>
133	UINT_TPR	Character	1	0
134	CON	Numeric	11	0
135	DEC	Numeric	11	0
136	CGRP	Character	10	0
137	UCON	Numeric	11	0
138	UDEC	Numeric	11	0
139	UCGRP	Character	10	0
140	LEADCON	Character	10	0
141	ULEADCON	Character	10	0
142	SECCON	Character	10	0
143	USECCON	Character	10	0
144	ST_NUM	Numeric	11	0
145	UST_NUM	Numeric	11	0
146	NET_ST_NUM	Numeric	11	0
147	STRATA	Character	10	0
148	USTRATA	Character	10	0
149	NET_STRATA	Character	12	0
150	NET_DEN	Character	6	0
151	STATE	Character	6	0
152	USTATE	Character	6	0
153	NET_STATE	Character	6	0
154	ST_USED	Character	6	0
155	NHA	Numeric	18	6
156	PRIHA	Numeric	18	6
157	EX1	Character	10	0
158	OEX2	Character	10	0
159	UEX2	Character	10	0
160	EX2	Character	10	0
161	EX3	Character	10	0
162	HORZHA	Numeric	8	6
163	LANDBASE	Character	5	0
164	TOWNSHIP	Character	9	0
165	NET_SEASON	Character	6	0
166	NET_INVENT	Character	5	0
167	PLAN_UNIT	Character	9	0
168	CURR_AGE	Numeric	11	0
169	P_AGE	Numeric	11	0
170	UCURR_AGE	Numeric	11	0
171	UP_AGE	Numeric	11	0
172	NET_P_AGE	Numeric	11	0
173	NET_CURAGE	Numeric	11	0
174	TSA_PERIOD	Numeric	11	0
175	CC_YR	Numeric	11	0
176	CC_LB	Character	10	0
177	ISOL_FLAG	Numeric	11	0

Table Index	Defined Item Name	Type	Width	Decimal
178	NET_LABEL	Character	75	0
179	SW_SPH	Numeric	18	6
180	DU_LEADCON	Character	2	0
181	NET_DU	Character	1	0
182	NET_CGRP	Character	3	0
183	NET_HEIGHT	Number	11	0

<b>1. AREA – GIS Area Field</b>	
<i>Code</i>	<i>Description</i>
#####	Area in m <sup>2</sup>

<b>2. LINK_KEY – Primary key used to join spatial coverages with database files.</b>	
<i>Code</i>	<i>Description</i>
#####	Unique Key

<b>3. POLY_NUM – Alberta-Pacific AVI Unique Polygon Identifier.</b>	
<i>Code</i>	<i>Description</i>
#####	Township, Range, Meridian and Polygon Number

<b>4. AP_OPER – Alberta-Pacific Operating Unit.</b>	
<i>Code</i>	<i>Description</i>
XXX	Operating unit

<b>5. FMUJ – Alberta-Pacific Forest Management Unit.</b>	
<i>Code</i>	<i>Description</i>
XXX	FMU Code (a1, a2, a3, a4, etc....)

<b>6. PNT – Protected Notation.</b>	
<i>Code</i>	<i>Description</i>
PNT#####	PNT number – Stringing overlapping PNTs together

<b>7. HARVESTABL – Protective Notation Harvest Status.</b>	
<i>Code</i>	<i>Description</i>
NO	PNT is Not Harvestable
“”	PNT is Potentially Harvestable and/or No PNT Status

<b>8. PNT1 – First Protective Notation.</b>	
<i>Code</i>	<i>Description</i>
PNT#####	PNT number of first PNT

<b>9. HARV1 – First Protective Notation Harvest Status.</b>	
<i>Code</i>	<i>Description</i>
YES	PNT is Harvestable
Maybe (Y)	Likely the PNT is Harvestable
Maybe (N)	Likely the PNT is Not Harvestable
NO	PNT is Not Harvestable

<b>10. PNT2 – Second Protective Notation.</b>	
<i>Code</i>	<i>Description</i>
PNT#####	PNT number of second PNT where two or more overlap

<b>11. HARV2 – Second Protective Notation Harvest Status.</b>	
<i>Code</i>	<i>Description</i>
YES	PNT is Harvestable
Maybe (Y)	Likely the PNT is Harvestable
Maybe (N)	Likely the PNT is Not Harvestable
NO	PNT is Not Harvestable

<b>12. PNT3 – Third Protective Notation.</b>	
<i>Code</i>	<i>Description</i>
PNT#####	PNT number of third PNT where three overlap

<b>13. HARV3 – Third Protective Notation Harvest Status.</b>	
<i>Code</i>	<i>Description</i>
YES	PNT is Harvestable
Maybe (Y)	Likely the PNT is Harvestable
Maybe (N)	Likely the PNT is Not Harvestable
NO	PNT is Not Harvestable

<b>14. PROTECT – Protected areas.</b>	
<i>Code</i>	<i>Description</i>
“”	Null value
LIEGE	Liege
BOREAL	Boreal Sites
RIVBRK	River Breaks
NOMATE	Nominated

<b>15. NSR – Natural Sub-Region.</b>	
<i>Code</i>	<i>Description</i>
BFCM	Boreal forest – Central Mixedwood
BFDM	Boreal forest – Dry Mixedwood
BFSA	Boreal forest – Sub Arctic
BFBH	Boreal forest – Boreal Highlands
FHLF	Foothills – Lower Foothills
FHUF	Foothills –Upper Foothills
CSAP	Canadian Shield

<b>16. PUNUM– Alberta Pacific Planning Unit Number.</b>	
<i>Code</i>	<i>Description</i>
XXXXXX	Six digit planning unit number.

<b>17. ENTRYYEAR– Year of Entry; Planning Unit.</b>	
<i>Code</i>	<i>Description</i>
####	Year

<b>18. TLE– Treaty Land Entitlement Identified By Alberta Gov. - SRD</b>	
<i>Code</i>	<i>Description</i>
CALLING LAKE	Calling Lake

<b>19. FIRESMART– Firesmart Community Protection Zones Ident. By Alberta Gov. - SRD</b>	
<i>Code</i>	<i>Description</i>
“”	Null value
gov	Inside potential development area

<b>20. BENCH– Ecological Benchmarks Identified By Alberta-Pacific</b>	
<i>Code</i>	<i>Description</i>
ATHABASCA	Athabasca
GYPSY-GORDON	Gypsy-Gordon

<b>21. MOSA– Mineable Oil Sands Area Identified By Alberta Gov. - SRD</b>	
<i>Code</i>	<i>Description</i>
MOS	MOSA

<b>22. OIL_AP– Proposed Oil Sands Deletions Identified By Alberta-Pacific</b>	
<i>Code</i>	<i>Description</i>
“”	Null value
2001-2006	Developments expected to go ahead with next 5 years
2007-2011	Developments expected to go ahead in 5 to 10 years
2012-2016	Developments expected to go ahead in 10 to 15 years
out	Area already developed

<b>23. OIL_GOV</b> – Potential Oil Sands Deletion Area Identified By Alberta Gov. - SRD	
<i>Code</i>	<i>Description</i>
“”	Null value
gov	Inside potential development area

<b>24. WBUF</b> – Water Buffer.	
<i>Code</i>	<i>Description</i>
0	Null value
2	Internal polygons (polygons surrounded by water buffers)
3	Ground rule buffers (lakes, large/small permanent)

<b>25. OIL</b> – Oil and Gas Activity.	
<i>Code</i>	<i>Description</i>
“”	Null value
OIL	Oils and gas activity. (e.g. gasoline, pipeline, access road, oil pad)

<b>26. PRI_LND</b> – Private land identifier.	
<i>Code</i>	<i>Description</i>
“”	Null value
PRI	Private land identified

<b>27. PER_PRI</b> – Private land reduction	
<i>Code</i>	<i>Description</i>
0	Null value
#	Number indicates the percentage reduction to be applied.

<b>28. IRP</b> – Big Bend Integrated Resource Plan: Restricted Harvesting Buffers	
<i>Code</i>	<i>Description</i>
“”	Null value
IRP	Inside buffer

<b>29. PSP</b> – Permanent sample plot buffer.	
<i>Code</i>	<i>Description</i>
“”	Null value
PSP	Inside PSP buffer

<b>30. SLOPE</b> – Slope greater than 45%	
<i>Code</i>	<i>Description</i>
“”	Slope < 45%
SLOPE	Slope > 45%

<b>31. FIRE</b> – Fire update.	
<i>Code</i>	<i>Description</i>
“”	Null value
FIRE	Fire has occurred since last inventory update

<b>32. FIRE_YEAR</b> – Fire Year.	
<i>Code</i>	<i>Description</i>
“”	Null value
####	The year the fire occurred

<b>33. MOF</b> – Maintain our Forest Blocks.	
<i>Code</i>	<i>Description</i>
“”	Null value
MOF	Area designated as MOF

<b>34. GRAZING</b> – Grazing Depositions.	
<i>Code</i>	<i>Description</i>
“”	Null value
GRAZE	Grazing Deposition

<b>35. ABO_RES</b> – Aboriginal Reserve	
<i>Code</i>	<i>Description</i>
“”	Null value
ABRES	Aboriginal Reserve

<b>36. ECO_RES</b> – Ecological Reserve	
<i>Code</i>	<i>Description</i>
“”	Null value
ECRES	Ecological Reserve

<b>37. PARK</b> – Parks, natural and wilderness areas.	
<i>Code</i>	<i>Description</i>
“”	Null value
ER	Ecological Reserve
NP	National Park
NA	Natural Area
PP	Provincial Park
WA	Wilderness Area
WP	Wilderness Park

<b>38. CARIBOU – Caribou Zones.</b>	
<i>Code</i>	<i>Description</i>
“”	Null value
CARIBOU	Caribou habitat

<b>39. MOOSE – Moose Zones.</b>	
<i>Code</i>	<i>Description</i>
“”	Null value
MOOSE	Moose habitat

<b>40. SEASON – Summer Ground Classification.</b>	
<i>Code</i>	<i>Description</i>
“”	Null value
SUM	Area designated as summer ground

<b>41. Q_CC_LB – Quota Holders Cutblock Landbase Designation.</b>	
<i>Code</i>	<i>Description</i>
“”	Null value
“D”	Deciduous Strata
“C”	Coniferous Strata

<b>42. Q_CC_YR – Quota Holders Existing Cutblock Harvest Year</b>	
<i>Code</i>	<i>Description</i>
####	Year in which the cut block was harvested.

<b>43. Q_OPU – Quota Holders Operating Unit</b>	
<i>Code</i>	<i>Description</i>
0	Null

<b>44. SOURCE – Source of Quota Holder Cutblock Information</b>	
<i>Code</i>	<i>Description</i>
“”	Null
“TEXT”	Text describing source of cutblock information.

<b>45. YEAR_CUT – Harvest Year for RSI/SIS Cutblocks Identified by Millar Western</b>	
<i>Code</i>	<i>Description</i>
0	Null value
####	Year in which the cut block was harvested.

<b>46. RSTRATA – Unique Code for RSI/SIS Stratum Identified by Millar Western</b>	
<i>Code</i>	<i>Description</i>
AW	Deciduous Type – Natural
AW-S-O	Deciduous Type – Natural
AW-S-C-S	Deciduous Type – Natural
AW-PJ	Deciduous Type – Natural
AWS-S	Deciduous/Coniferous Types - Natural
AWPJ	Deciduous/Coniferous Types - Natural
SAW-S	Coniferous/Deciduous Types - Natural
SW-C-FM	Coniferous Types - Natural
SW-C-G	Coniferous Types - Natural
SW-O	Coniferous Types - Natural
SB-C-FM	Coniferous Types - Natural
SB-C-G	Coniferous Types - Natural
SB-O	Coniferous Types - Natural
PJ-C-G	Coniferous Types - Natural
PJ-O-C-FM	Coniferous Types - Natural
AW-U-FM	Deciduous Type with understory – Natural
AW-U-G	Deciduous Type with understory – Natural
AW-S-U-S	Deciduous Type with understory – Natural

<b>47. G_CC_LB – GDP Landbase</b>	
<i>Code</i>	<i>Description</i>
“”	Null value
“D”	Deciduous
“C”	Coniferous

<b>48. G_CC_YR – GDP Cutblock Harvest Year</b>	
<i>Code</i>	<i>Description</i>
#####	Year in which the cutblock was harvested

<b>49. AVI_YR – GDP Cutblock Harvest Year</b>	
<i>Code</i>	<i>Description</i>
#####	Year in which the cutblock was harvested

<b>50. AVI_LB – GDP Landbase</b>	
<i>Code</i>	<i>Description</i>
“”	Null value
“D”	Deciduous
“C”	Coniferous

<b>51. F – Provincial forest.</b>	
<i>Code</i>	<i>Description</i>
L	Lac La Biche
A	Athabasca
S	Slave Lake

<b>52. MU – Management Unit.</b>	
<i>Code</i>	<i>Description</i>
XX	Management unit code

<b>53. MGR – Manager.</b>	
<i>Code</i>	<i>Description</i>
	Default
J	Alberta Pacific

<b>54. OPUNIT – Operating Unit (FMU Subdivisions)</b>	
<i>Code</i>	<i>Description</i>
#	Operating unit

<b>55. MOIST_REG – Moisture_regime: A general description of the moisture quality.</b>	
<i>Code</i>	<i>Description</i>
d	Dry – rapidly drained substratum
m	Mesic – moderately well drained substratum
w	Wet – poorly drained to flooded where the water table is usually at or near the surface, or the land is covered by shallow water.
a	Aquatic – permanent deep water areas where the pre-dominant growth medium is water and the vegetation is characterized by hydrophytic vegetation (emergent) that grows in or at the surface of the water.

<b>56. DENSITY Crown_closure: Percentage area covered by projection of the tree crowns to the ground.</b>	
<i>Code</i>	<i>Description</i>
A	6 – 30%
B	31 – 50%
C	51 – 70%
D	71 – 100%

<b>57. HEIGHT – Stand_height or Shrub_height: Average height of the leading species of trees or plants (shrub) in meters.</b>	
<i>Code</i>	<i>Description</i>
1 – 40	Stand height is measured and recorded to the nearest metre.

<b>58. SP1 – Species_type 1:</b> – Dominant species based on crown closure.	
<i>Code</i>	<i>Description</i>
A	Aspen
Aw	Trembling Aspen – Populus tremuloides
Bw	Paper (white) Birch – Betula papyrifera
Fa	Alpine Fir – Abies lasiocarpa
Fb	Balsam Fir – Abies balsamea
Fd	Douglas Fir – Pseudotsuga menziesii
La	Alpine Larch – Larix lyallii
Lt	Tamarack – Larix laricina
Lw	Western Larch – Larix occidentalis
P	Pine
Pa	White-bark Pine – Pinus albicaulis
Pb	Balsam Poplar – Populus balsamifera
Pf	Limber Pine – Pinus flexilis
Pj	Jack Pine – Pinus banksiana
Pl	Lodgepole Pine – Pinus contorta
Sb	Black Spruce – Picea mariana
Se	Engelmann Spruce – Picea engelmannii
Sw	White Spruce – Picea glauca

<b>59. SP1_PER</b> – Species 1 Percentage within stand based on crown closure to closest 10%.	
<i>Code</i>	<i>Description</i>
0 – 10	0 – 100 percent

<b>60. SP2 – Species_type 2:</b> – Second dominant species based on crown closure.	
<i>Code</i>	<i>Description</i>
A	Aspen
Aw	Trembling Aspen – Populus tremuloides
Bw	Paper (white) Birch – Betula papyrifera
Fa	Alpine Fir – Abies lasiocarpa
Fb	Balsam Fir – Abies balsamea
Fd	Douglas Fir – Pseudotsuga menziesii
La	Alpine Larch – Larix lyallii
Lt	Tamarack – Larix laricina
Lw	Western Larch – Larix occidentalis
P	Pine
Pa	White-bark Pine – Pinus albicaulis
Pb	Balsam Poplar – Populus balsamifera
Pf	Limber Pine – Pinus flexilis
Pj	Jack Pine – Pinus banksiana
Pl	Lodgepole Pine – Pinus contorta
Sb	Black Spruce – Picea mariana
Se	Engelmann Spruce – Picea engelmannii

Sw	White Spruce – Picea glauca
----	-----------------------------

**61. SP2\_PER** – Species 2 Percentage within stand based on crown closure to closest 10%.

<i>Code</i>	<i>Description</i>
0 – 5	0 – 50 percent

**62. SP3** – *Species\_type 3:* – Third dominant species based on crown closure.

<i>Code</i>	<i>Description</i>
A	Aspen
Aw	Trembling Aspen – Populus tremuloides
Bw	Paper (white) Birch – Betula papyrifera
Fa	Alpine Fir – Abies lasiocarpa
Fb	Balsam Fir – Abies balsamea
Fd	Douglas Fir – Pseudotsuga menziesii
La	Alpine Larch – Larix lyallii
Lt	Tamarack – Larix laricina
Lw	Western Larch – Larix occidentalis
P	Pine
Pa	White-bark Pine – Pinus albicaulis
Pb	Balsam Poplar – Populus balsamifera
Pf	Limber Pine – Pinus flexilis
Pj	Jack Pine – Pinus banksiana
Pl	Lodgepole Pine – Pinus contorta
Sb	Black Spruce – Picea mariana
Se	Engelmann Spruce – Picea engelmannii
Sw	White Spruce – Picea glauca

**63. SP3\_PER** – Species 3 Percentage within stand based on crown closure to closest 10%.

<i>Code</i>	<i>Description</i>
0 – 3	0 – 30 percent

**64. SP4** – *Species\_type 4:* Fourth dominant species based on crown closure.

<i>Code</i>	<i>Description</i>
A	Aspen
Aw	Trembling Aspen – Populus tremuloides
Bw	Paper (white) Birch – Betula papyrifera
Fa	Alpine Fir – Abies lasiocarpa
Fb	Balsam Fir – Abies balsamea
Fd	Douglas Fir – Pseudotsuga menziesii
La	Alpine Larch – Larix lyallii
Lt	Tamarack – Larix laricina
Lw	Western Larch – Larix occidentalis
P	Pine
Pa	White-bark Pine – Pinus albicaulis

Pb	Balsam Poplar – <i>Populus balsamifera</i>
Pf	Limber Pine – <i>Pinus flexilis</i>
Pj	Jack Pine – <i>Pinus banksiana</i>
Pl	Lodgepole Pine – <i>Pinus contorta</i>
Sb	Black Spruce – <i>Picea mariana</i>
Se	Engelmann Spruce – <i>Picea engelmannii</i>
Sw	White Spruce – <i>Picea glauca</i>

**65. SP4\_PER – Species 4 Percentage within stand based on crown closure to closest 10%.**

<i>Code</i>	<i>Description</i>
0– 2	0 – 20 percent

**66. SP5 – Species\_type 5: Fifth dominant species based on crown closure.**

<i>Code</i>	<i>Description</i>
A	Aspen
Aw	Trembling Aspen – <i>Populus tremuloides</i>
Bw	Paper (white) Birch – <i>Betula papyrifera</i>
Fa	Alpine Fir – <i>Abies lasiocarpa</i>
Fb	Balsam Fir – <i>Abies balsamea</i>
Fd	Douglas Fir – <i>Pseudotsuga menziesii</i>
La	Alpine Larch – <i>Larix lyallii</i>
Lt	Tamarack – <i>Larix laricina</i>
Lw	Western Larch – <i>Larix occidentalis</i>
P	Pine
Pa	White-bark Pine – <i>Pinus albicaulis</i>
Pb	Balsam Poplar – <i>Populus balsamifera</i>
Pf	Limber Pine – <i>Pinus flexilis</i>
Pj	Jack Pine – <i>Pinus banksiana</i>
Pl	Lodgepole Pine – <i>Pinus contorta</i>
Sb	Black Spruce – <i>Picea mariana</i>
Se	Engelmann Spruce – <i>Picea engelmannii</i>
Sw	White Spruce – <i>Picea glauca</i>

**67. SP5\_PER – Species 5 Percentage within stand based on crown closure to closest 10%.**

<i>Code</i>	<i>Description</i>
0 – 2	0 – 20 percent

<b>68. STRUC – Layer_type:</b> Classification of stand structure.	
<i>Code</i>	<i>Description</i>
BLANK	single story or a non-forest polygon
C	Complex – Complex structured stands are those where multiple layers form a pattern or mosaic that cannot be described using the criteria for multi-layer or horizontal structured stands. These stands are often patterns of different heights that are intermixed throughout the stand.
H	Horizontal – Indicates a horizontal relationship between the sub-stands instead of a two-story or complex structure. Patches of different species of trees are too small to classify as a single stand are amalgamated together as one.
M	Multi-layer canopy – Stands in which two or more distinct layers are visible. Most have only two layers. Generally, the two layers are intermixed, i.e., when viewed vertically, one layer is above the other. The average height of the top layer must differ from the average height of the lower layer by 3m or more.

<b>69. STRUC_VAL – Layer_Modifier:</b> Percentage area of stand covered by Horizontal layer, or difference between the midpoint of upper layer to midpoint of lower layer for complex stands.	
<i>Code</i>	<i>Description</i>
0 – 9	0 – 90 percent

<b>70. ORIGIN – Year of the stand origin.</b>	
<i>Code</i>	<i>Description</i>
0 – 9999	Year

<b>71. TPR – Potential timber productivity of a stand based height and age of dominant and co-dominant trees of the leading species</b>	
<i>Code</i>	<i>Description</i>
F	Fair
G	Good
M	Medium
U	Unproductive

<b>72. INITIALS – Interpreter_initials:</b> Initials of person that interpreted the stand.	
<i>Code</i>	<i>Description</i>
AA-ZZ	Any 2 alphanumeric characters that represent the interpreter's initials.

**73. NFL – Non\_forest\_code:** A layer where the major component is naturally non-forested. A layer containing  $\geq 6\%$  plant cover but  $< 6\%$  tree cover.

<i>Code</i>	<i>Description</i>
BR	Bryophyte – mosses and/or bryophytes
HF	Herbaceous (Forbs) – natural herbaceous plant cover dominated by forbs (not graminoids). Forbs included aquatic plants living in shallow water.
HG	Herbaceous (Grassland) – natural meadow and grassland and/or sedges, graminoids predominant.
SC	closed shrub (crowns of most shrubs interlocking)
SO	open shrub (crowns of most shrubs not touching each other)

**74. NFL\_PER– Shrub\_closure:** Shrub crown closure within the stand to the nearest % 10. Attribute information is required when the NFL is SO or SC.

<i>Code</i>	<i>Description</i>
0 – 10	0 – 100 percent

**75. NAT\_NON – Nat\_non\_veg\_code:** Natural cover types that have  $< 6\%$  plant cover.

<i>Code</i>	<i>Description</i>
NMB	Recent Burn including snag modifier and snag density (to date no recovery of vegetation) if present.
NMC	Cutbank
NMR	Rock Barren
NMS	Sand
NWF	Flooded – areas periodically inundated with water
NWI	Permanent Ice/Snow
NWL	Seasonally thaws: Lakes, ponds
NWR	River

**76. ANTH\_VEG – Anth\_veg\_code:** A vegetated stand where the vegetation has been influenced by man, usually in areas that have been planted with cultivated species.

<i>Code</i>	<i>Description</i>
CA	Annual Crops – cultivated farmland, or farmland planted with annual crop species.
CIP	Pipelines, transmission lines, airstrips, microwave tower sites that have been seeded to perennial grasses.
CIW	Geophysical activities including well sites that have been seeded to perennial grasses.
CP	Perennial Forage Crops – reclaimed lands, farmland planted with cultivated grasses and/or legumes. These lands are used primarily for grazing livestock or may have the cultivated species harvested at least once a year. These lands contain $< 10\%$ crown closure of woody cover (shrubs). These lands also included pastures that have been irrigated or otherwise treated to improve their productivity.
CPR	Rough Pasture – similar to improved pasture (CP) with $> 10\%$ woody cover. Normally, this pasture has not been irrigated, fertilized or

	cultivated to improve productivity. An open or closed shrub notation must be added to indicate the height, extent and type of shrub cover.
--	--

**77. ANTH\_NON** – *Anth\_non\_veg\_code*: A layer where the major component is anthropogenic non-vegetated created by man.

<i>Code</i>	<i>Description</i>
AIE	Peat Extractions
AIF	Farmsteads
AIG	Gravel pits including borrow pits
AIH	Permanent right of way; roads, highways, railroads, dam sites, reservoirs.
AII	Industrial (plant sites), sewage lagoons.
AIM	Surface mines
ASC	Cities, towns, villages, hamlets
ASR	Ribbon development, rural recreation, rural stores and isolated housing subdivisions, cottages, rural residential, acreage owners, (agriculture is not the primary source of income).

**78. MOD1** – *Modifier\_code*: A condition or treatment providing additional information about the origin or condition of the cover type.

<i>Code</i>	<i>Description</i>
BU	Burn/partial burn
CC	Clearcut/partial cut
CL	Clearing
DI	Disease
DT	Discoloured/dead tops
GR	Developed for grazing domestic livestock
IK	Insect kill
IR	Irrigated
PL	Planted and/or seeded
SC	Seedbed prepared
SI	Site Improved
SN	Snags
ST	Scattered timber
TH	Thinned
UK	Unknown kill
WE	Weather
WF	Windfall

**79. MOD1\_EXT** – *Modifier\_extent*: Percentage based indication of what portion of stand by crown closure is affected by the condition or treatment.

<i>Code</i>	<i>Description</i>
0 – 5	0 – 50 percent

**80. MOD1\_YR** – *Modifier\_year* – Year that condition or treatment took place where known.

<i>Code</i>	<i>Description</i>
0 – 9999	Year

**81. MOD2 – *Modifier\_code*:** A condition or treatment providing additional information about the origin or condition of the cover type.

<i>Code</i>	<i>Description</i>
BT	Broken tops
BU	Burn/partial burn
CC	Clearcut/partial cut
CL	Clearing
DI	Disease
DT	Discoloured/dead tops
GR	Developed for grazing domestic livestock
IK	Insect kill
IR	Irrigated
PL	Planted and/or seeded
SC	Seedbed prepared
SI	Site Improved
SN	Snags
ST	Scattered timber
TH	Thinned
UK	Unknown kill
WE	Weather
WF	Windfall

**82. MOD2\_EXT – *Modifier\_extent*:** Percentage based indication of what portion of stand by crown closure is affected by the condition or treatment.

<i>Code</i>	<i>Description</i>
0 – 5	0 – 50 percent

**83. MOD2\_YR – *Modifier\_year*:** Year that condition or treatment took place where known.

<i>Code</i>	<i>Description</i>
0 – 9999	Year

**84. DATA – *Existing\_data\_code*:** Data gathered from other existing sources that aided in the interpretation of the stand.

<i>Code</i>	<i>Description</i>
A	Air call
C	Cruise data
F	Interpreter plot
I	Interpreted TPR
L	Large-scale photography
P	PSP
S	Supplementary photography

V	Volume plot
---	-------------

**85. DATA1\_YR** – *Existing\_data\_year*: Year associated with external data source.

<i>Code</i>	<i>Description</i>
0 – 9999	Year

**86. UMOIST\_REG** – *Moisture\_regime*: A general description of the moisture quality.

<i>Code</i>	<i>Description</i>
d	Dry – rapidly drained substratum
m	Mesic – moderately well drained substratum
w	Wet – poorly drained to flooded where the water table is usually at or near the surface, or the land is covered by shallow water.
a	Aquatic – permanent deep water areas where the pre-dominant growth medium is water and the vegetation is characterized by hydrophytic vegetation (emergent) that grows in or at the surface of the water.

**87. UDENSITY** *Crown\_closure*: Percentage of ground area covered by the vertical projection of the tree crowns to the ground.

<i>Code</i>	<i>Description</i>
A	6 – 30%
B	31 – 50%
C	51 – 70%
D	71 – 100%

**88. UHEIGHT** – *Stand\_height or Shrub\_height*: Average height of the leading species of trees or plants (shrub) in meters.

<i>Code</i>	<i>Description</i>
1 – 40	Stand height is interpreted or determined through field measurements and recorded to the nearest metre.

**89. USP1** – *Species\_type 1*: – Dominant species based on crown closure of the overstory layer.

<i>Code</i>	<i>Description</i>
A	Aspen
Aw	Trembling Aspen – <i>Populus tremuloides</i>
Bw	Paper (white) Birch – <i>Betula papyrifera</i>
Fa	Alpine Fir – <i>Abies lasiocarpa</i>
Fb	Balsam Fir – <i>Abies balsamea</i>
Fd	Douglas Fir – <i>Pseudotsuga menziesii</i>
La	Alpine Larch – <i>Larix lyallii</i>
Lt	Tamarack – <i>Larix laricina</i>
Lw	Western Larch – <i>Larix occidentalis</i>
P	Pine
Pa	White-bark Pine – <i>Pinus albicaulis</i>

Pb	Balsam Poplar – <i>Populus balsamifera</i>
Pf	Limber Pine – <i>Pinus flexilis</i>
Pj	Jack Pine – <i>Pinus banksiana</i>
Pl	Lodgepole Pine – <i>Pinus contorta</i>
Sb	Black Spruce – <i>Picea mariana</i>
Se	Engelmann Spruce – <i>Picea engelmannii</i>
Sw	White Spruce – <i>Picea glauca</i>

**90. USP1\_PER** – Species 1 Percentage within stand based on crown closure to closest 10%.

<i>Code</i>	<i>Description</i>
0 – 10	0 – 100 percent

**91. USP2** – *Species\_type 2:* – Second dominant species based on crown closure.

<i>Code</i>	<i>Description</i>
A	Aspen
Aw	Trembling Aspen – <i>Populus tremuloides</i>
Bw	Paper (white) Birch – <i>Betula papyrifera</i>
Fa	Alpine Fir – <i>Abies lasiocarpa</i>
Fb	Balsam Fir – <i>Abies balsamea</i>
Fd	Douglas Fir – <i>Pseudotsuga menziesii</i>
La	Alpine Larch – <i>Larix lyallii</i>
Lt	Tamarack – <i>Larix laricina</i>
Lw	Western Larch – <i>Larix occidentalis</i>
P	Pine
Pa	White-bark Pine – <i>Pinus albicaulis</i>
Pb	Balsam Poplar – <i>Populus balsamifera</i>
Pf	Limber Pine – <i>Pinus flexilis</i>
Pj	Jack Pine – <i>Pinus banksiana</i>
Pl	Lodgepole Pine – <i>Pinus contorta</i>
Sb	Black Spruce – <i>Picea mariana</i>
Se	Engelmann Spruce – <i>Picea engelmannii</i>
Sw	White Spruce – <i>Picea glauca</i>

**92. USP2\_PER** – Species 2 Percentage within stand based on crown closure to closest 10%.

<i>Code</i>	<i>Description</i>
0 – 5	0 – 50 percent

**93. USP3** – *Species\_type 3:* – Third dominant species based on crown closure.

<i>Code</i>	<i>Description</i>
A	Aspen
Aw	Trembling Aspen – <i>Populus tremuloides</i>
Bw	Paper (white) Birch – <i>Betula papyrifera</i>

Fa	Alpine Fir – <i>Abies lasiocarpa</i>
Fb	Balsam Fir – <i>Abies balsamea</i>
Fd	Douglas Fir – <i>Pseudotsuga menziesii</i>
La	Alpine Larch – <i>Larix lyallii</i>
Lt	Tamarack – <i>Larix laricina</i>
Lw	Western Larch – <i>Larix occidentalis</i>
P	Pine
Pa	White-bark Pine – <i>Pinus albicaulis</i>
Pb	Balsam Poplar – <i>Populus balsamifera</i>
Pf	Limber Pine – <i>Pinus flexilis</i>
Pj	Jack Pine – <i>Pinus banksiana</i>
Pl	Lodgepole Pine – <i>Pinus contorta</i>
Sb	Black Spruce – <i>Picea mariana</i>
Se	Engelmann Spruce – <i>Picea engelmannii</i>
Sw	White Spruce – <i>Picea glauca</i>

**94. USP3\_PER** – Species 3 Percentage within stand based on crown closure to closest 10%.

<i>Code</i>	<i>Description</i>
0 – 3	0 – 30 percent

**95. USP4** – *Species\_type 4*: Fourth dominant species based on crown closure.

<i>Code</i>	<i>Description</i>
A	Aspen
Aw	Trembling Aspen – <i>Populus tremuloides</i>
Bw	Paper (white) Birch – <i>Betula papyrifera</i>
Fa	Alpine Fir – <i>Abies lasiocarpa</i>
Fb	Balsam Fir – <i>Abies balsamea</i>
Fd	Douglas Fir – <i>Pseudotsuga menziesii</i>
La	Alpine Larch – <i>Larix lyallii</i>
Lt	Tamarack – <i>Larix laricina</i>
Lw	Western Larch – <i>Larix occidentalis</i>
P	Pine
Pa	White-bark Pine – <i>Pinus albicaulis</i>
Pb	Balsam Poplar – <i>Populus balsamifera</i>
Pf	Limber Pine – <i>Pinus flexilis</i>
Pj	Jack Pine – <i>Pinus banksiana</i>
Pl	Lodgepole Pine – <i>Pinus contorta</i>
Sb	Black Spruce – <i>Picea mariana</i>
Se	Engelmann Spruce – <i>Picea engelmannii</i>
Sw	White Spruce – <i>Picea glauca</i>

<b>96. USP4_PER</b> – Species 4 Percentage within stand based on crown closure to closest 10%.	
<i>Code</i>	<i>Description</i>
0 – 2	0 – 20 percent

<b>97. USP5</b> – <i>Species_type 5</i> : Fifth dominant species based on crown closure.	
<i>Code</i>	<i>Description</i>
A	Aspen
Aw	Trembling Aspen – <i>Populus tremuloides</i>
Bw	Paper (white) Birch – <i>Betula papyrifera</i>
Fa	Alpine Fir – <i>Abies lasiocarpa</i>
Fb	Balsam Fir – <i>Abies balsamea</i>
Fd	Douglas Fir – <i>Pseudotsuga menziesii</i>
La	Alpine Larch – <i>Larix lyallii</i>
Lt	Tamarack – <i>Larix laricina</i>
Lw	Western Larch – <i>Larix occidentalis</i>
P	Pine
Pa	White-bark Pine – <i>Pinus albicaulis</i>
Pb	Balsam Poplar – <i>Populus balsamifera</i>
Pf	Limber Pine – <i>Pinus flexilis</i>
Pj	Jack Pine – <i>Pinus banksiana</i>
Pl	Lodgepole Pine – <i>Pinus contorta</i>
Sb	Black Spruce – <i>Picea mariana</i>
Se	Engelmann Spruce – <i>Picea engelmannii</i>
Sw	White Spruce – <i>Picea glauca</i>

<b>98. USP5_PER</b> – Species 5 Percentage within stand based on crown closure to closest 10%.	
<i>Code</i>	<i>Description</i>
0 – 2	0 – 20 percent

<b>99. USTRUC</b> – <i>Layer_type</i> : Classification of stand structure.	
<i>Code</i>	<i>Description</i>
BLANK	single story or a non-forest polygon
C	Complex – Complex structured stands are those where multiple layers form a pattern or mosaic that cannot be described using the criteria for multi-layer or horizontal structured stands. These stands are often patterns of different heights that are intermixed throughout the stand.
H	Horizontal – Indicates a horizontal relationship between the sub-stands instead of a two-story or complex structure. Patches of different species of trees are too small to classify as a single stand are amalgamated together as one.
M	Multi-layer canopy – Stands in which two or more distinct layers are visible. Most have only two layers. Generally, the two layers are intermixed, i.e., when viewed vertically, one layer is above the other. The

	average height of the top layer must differ from the average height of the lower layer by 3m or more.
--	---

**100. USTRUC\_VAL – Layer\_Modifier:** Percentage area of stand covered by Horizontal layer, or difference between the midpoint of upper layer to midpoint of lower layer for complex stands.

<i>Code</i>	<i>Description</i>
0 – 9	0 – 90 percent

**101. UORIGIN – Year of the stand origin.**

<i>Code</i>	<i>Description</i>
0 – 9999	Year

**102. UTPR – Potential timber productivity of a stand based height and age of dominant and co-dominant trees of the leading species**

<i>Code</i>	<i>Description</i>
F	Fair
G	Good
M	Medium
U	Unproductive

**103. UINITIALS – Interpreter\_initials:** Initials of person that interpreted the stand.

<i>Code</i>	<i>Description</i>
AA-ZZ	Any 2 alphanumeric characters that represent the interpreter’s initials.

**104. UNFL – Non\_forest\_code:** A layer where the major component is naturally non-forested. A layer containing  $\geq$  6% plant cover but  $<$  6% tree cover.

<i>Code</i>	<i>Description</i>
BR	Bryophyte – mosses and/or bryophytes
HF	Herbaceous (Forbs) – natural herbaceous plant cover dominated by forbs (not graminoids). Forbs included aquatic plants living in shallow water.
HG	Herbaceous (Grassland) – natural meadow and grassland and/or sedges, graminoids predominant.
SC	closed shrub (crowns of most shrubs interlocking)
SO	open shrub (crowns of most shrubs not touching each other)

**105. UNFL\_PER– Shrub\_closure:** Shrub crown closure within the stand to the nearest 10%. Attribute information is required when the NFL is SO or SC.

<i>Code</i>	<i>Description</i>
0 – 10	0 – 100 percent

**106. UNAT\_NON – Nat\_non\_veg\_code:** Natural cover types that have  $<$  6% plant cover.

<i>Code</i>	<i>Description</i>
NMB	Recent Burn including snag modifier and snag density (to date no recovery of vegetation) if present.

NMC	Cutbank
NMR	Rock Barren
NMS	Sand
NWF	Flooded – areas periodically inundated with water
NWI	Permanent Ice/Snow
NWL	Seasonally thaws: Lakes, ponds
NWR	River

**107. UANTH\_VEG – *Anth\_veg\_code*:** A vegetated stand where the vegetation has been influenced by man, usually in areas that have been planted with cultivated species.

<i>Code</i>	<i>Description</i>
CA	Annual Crops – cultivated farmland, or farmland planted with annual crop species.
CIP	Pipelines, transmission lines, airstrips, microwave tower sites that have been seeded to perennial grasses.
CIW	Geophysical activities including well sites that have been seeded to perennial grasses.
CP	Perennial Forage Crops – reclaimed lands, farmland planted with cultivated grasses and/or legumes. These lands are used primarily for grazing livestock or may have the cultivated species harvested at least once a year. These lands contain < 10% crown closure of woody cover (shrubs). These lands also included pastures that have been irrigated or otherwise treated to improve their productivity.
CPR	Rough Pasture – similar to improved pasture (CP) with > 10% woody cover. Normally, this pasture has not been irrigated, fertilized or cultivated to improve productivity. An open or closed shrub notation must be added to indicate the height, extent and type of shrub cover.

**108. UANTH\_NON – *Anth\_non\_veg\_code*:** A layer where the major component is anthropogenic non-vegetated created by man.

<i>Code</i>	<i>Description</i>
AIE	Peat Extractions
AIF	Farmsteads
AIG	Gravel pits including borrow pits
AIH	Permanent right of way; roads, highways, railroads, dam sites, reservoirs.
AII	Industrial (plant sites), sewage lagoons.
AIM	Surface mines
ASC	Cities, towns, villages, hamlets
ASR	Ribbon development, rural recreation, rural stores and isolated housing subdivisions, cottages, rural residential, acreage owners, (agriculture is not the primary source of income).

**109. UMOD1 – Modifier\_code:** A condition or treatment providing additional information about the origin or condition of the cover type.

<i>Code</i>	<i>Description</i>
BU	Burn/partial burn
CC	Clearcut/partial cut
CL	Clearing
DI	Disease
DT	Discoloured/dead tops
GR	Developed for grazing domestic livestock
IK	Insect kill
IR	Irrigated
PL	Planted and/or seeded
SC	Seedbed prepared
SI	Site Improved
SN	Snags
ST	Scattered timber
TH	Thinned
UK	Unknown kill
WE	Weather
WF	Windfall

**110. UMOD1\_EXT – Modifier\_extent:** Percentage based indication of what portion of stand by crown closure is affected by the condition or treatment.

<i>Code</i>	<i>Description</i>
0 – 5	0 – 50 percent

**111. UMOD1\_YR – Modifier\_year –** Year that condition or treatment took place where known.

<i>Code</i>	<i>Description</i>
0 – 9999	Year

**112. UMOD2 – Modifier\_code:** A condition or treatment providing additional information about the origin or condition of the cover type.

<i>Code</i>	<i>Description</i>
BT	Broken tops
BU	Burn/partial burn
CC	Clearcut/partial cut
CL	Clearing
DI	Disease
DT	Discoloured/dead tops
GR	Developed for grazing domestic livestock
IK	Insect kill
IR	Irrigated
PL	Planted and/or seeded
SC	Seedbed prepared

SI	Site Improved
SN	Snags
ST	Scattered timber
TH	Thinned
UK	Unknown kill
WE	Weather
WF	Windfall

**113. UMOD2\_EXT** – *Modifier\_extent*: Percentage based indication of what portion of stand by crown closure is affected by the condition or treatment.

<i>Code</i>	<i>Description</i>
0 – 5	0 – 50 percent

**114. UMOD2\_YR** – *Modifier\_year*: Year that condition or treatment took place where known.

<i>Code</i>	<i>Description</i>
0 – 9999	Year

**115. UDATA** – *Existing\_data\_code*: Data gathered from other existing sources that aided in the interpretation of the stand.

<i>Code</i>	<i>Description</i>
A	Air call
C	Cruise data
F	Interpreter plot
I	Interpreted TPR
L	Large-scale photography
P	PSP
S	Supplementary photography
V	Volume plot

**116. UDATA\_YR** – *Existing\_data\_year*: Year associated with external data source.

<i>Code</i>	<i>Description</i>
0 – 9999	Year

**117. FMU** – Alberta-Pacific Forest Management Unit / Operating Compartment Code.

<i>Code</i>	<i>Description</i>
XXX	FMU/Operating Compartment Code (a1a, a1b, a1c, etc....)

**118. DENSITY\_PE** - Density Percentage

<i>Code</i>	<i>Description</i>
1 – 100%	Percentage of ground area covered by the vertical projection of the tree crowns to the ground.

**119. DECIMAL\_HT – *Decimal Height*:** height expressed to one tenth of a meter. Applicable only if the vegetated layer is less than 1 meter in height. If it is a forest vegetated layer, a data source of "A" or "F" (see documentation for "AVI Database", Table Name "avi21") must be specified as well.

<i>Code</i>	<i>Description</i>
0-9	Tenth of a meter.

**120. STEMS\_HA – Stems per Hectare**

<i>Code</i>	<i>Description</i>
1 – 99999	Estimated total of stems per hectare.

**121. MOIST\_CODE – A general description of the moisture quality.**

<i>Code</i>	<i>Description</i>
0	Very Xeric - (moist_reg = d)
1	Xeric - (moist_reg = d)
2	Sub Xeric - (moist_reg = d)
3	Submesic - (moist_reg = m)
4	Mesic - (moist_reg = m)
5	Subhydric - (moist_reg = m)
6	Hydric - (moist_reg = w)
7	Subhydric - (moist_reg = w)
8	Hydric - (moist_reg = a)

**122. MOD3 – *Modifier\_code*:** A condition or treatment providing additional information about the origin or condition of the cover type.

<i>Code</i>	<i>Description</i>
BT	Broken tops
BU	Burn/partial burn
CC	Clearcut/partial cut
CL	Clearing
DI	Disease
DT	Discoloured/dead tops
GR	Developed for grazing domestic livestock
IK	Insect kill
IR	Irrigated
PL	Planted and/or seeded
SC	Seedbed prepared
SI	Site Improved
SN	Snags
ST	Scattered timber
TH	Thinned
UK	Unknown kill
WE	Weather
WF	Windfall

**123. MOD3\_EXT – Modifier\_extent:** Indication of what portion of stand by crown closure is affected by the condition or treatment.

<i>Code</i>	<i>Description</i>	<i>Description: MOD3 = SN Snag Density (per 100 ha)</i>
0	Nil -	< 5
1	Light – 1% - 25% loss of crown closure or land area affected	5 – 99
2	Moderate – 26% - 50% loss of crown closure or land area affected	100 - 299
3	Heavy – 51% - 75% loss of crown closure or land area affected	300 - 499
4	Severe – 76% - 94% loss of crown closure or land area affected	500 - 700
5	Entire – entire closure or land area is affected	700

**124. MOD3\_YR – Modifier\_year –** Year that condition or treatment took place where known.

<i>Code</i>	<i>Description</i>
0 – 9999	Year

**125. INT\_TPR – Interpreted TPR –** Potential timber productivity of a stand based on height and age of dominant and co-dominant trees of the leading species.  
*AVI 2.2 Standards*

<i>Code</i>	<i>Description</i>
I	Interpreted

**126. UDENSITY\_P –** Density Percentage (understorey)

<i>Code</i>	<i>Description</i>
1 – 100%	Percentage of ground area covered by the vertical projection of the understorey tree crowns to the ground.

**127. UDECIMAL\_H – Decimal Height –** Collect to one tenth of a meter for stands less than 5 meters and for stands that have been identified as either planted or shrubs. (understorey)

<i>Code</i>	<i>Description</i>
0-9	Tenth of a meter.

**128. USTEMS\_HA –** Stems per Hectare (understorey)

<i>Code</i>	<i>Description</i>
1 – 99999	Estimated total of understorey stems per hectare.

<b>129. UMOIST_COD – A general description of the moisture quality. (understorey)</b>	
<i>Code</i>	<i>Description</i>
0	Very Xeric - (moist_reg = d)
1	Xeric - (moist_reg = d)
2	Sub Xeric - (moist_reg = d)
3	Submesic - (moist_reg = m)
4	Mesic - (moist_reg = m)
5	Subhydric - (moist_reg = m)
6	Hydric - (moist_reg = w)
7	Subhydric - (moist_reg = w)
8	Hydric - (moist_reg = a)

<b>130. UMOD3 – Modifier_code: A condition or treatment providing additional information about the origin or condition of the cover type. (understorey)</b>	
<i>Code</i>	<i>Description</i>
BT	Broken tops
BU	Burn/partial burn
CC	Clearcut/partial cut
CL	Clearing
DI	Disease
DT	Discoloured/dead tops
GR	Developed for grazing domestic livestock
IK	Insect kill
IR	Irrigated
PL	Planted and/or seeded
SC	Seedbed prepared
SI	Site Improved
SN	Snags
ST	Scattered timber
TH	Thinned
UK	Unknown kill
WE	Weather
WF	Windfall

<b>131. UMOD3_EXT – Modifier_extent: Indication of what portion of stand by crown closure is affected by the condition or treatment.</b>		
<i>Code</i>	<i>Description</i>	<i>Description: UMOD3 = SN Snag Density (per 100 ha)</i>
0	Nil -	< 5
1	Light – 1% - 25% loss of crown closure or land area affected	5 – 99
2	Moderate – 26% - 50% loss of crown closure or land area affected	100 - 299

3	Heavy – 51% - 75% loss of crown closure or land area affected	300 - 499
4	Severe – 76% - 94% loss of crown closure or land area affected	500 - 700
5	Entire – entire closure or land area is affected	700

**132. UMOD3\_YR – Modifier\_year** – Year that condition or treatment took place where known. (understorey)

<i>Code</i>	<i>Description</i>
0 – 9999	Year

**133. UINT\_TPR – Interpreted TPR** – Potential timber productivity of a stand based on height and age of dominant and co-dominant trees of the leading species. (understorey) *AVI 2.2 Standards*

<i>Code</i>	<i>Description</i>
I	Interpreted

**134. CON** – Percentage coniferous crown closure in overstorey.

<i>Code</i>	<i>Description</i>
##	Sum of conifer crown closure percentages in overstorey (0-10)

**135. DEC** – Percentage deciduous crown closure in overstorey.

<i>Code</i>	<i>Description</i>
##	Sum of deciduous crown closure percentages in overstorey

**136. CGRP** – Cover group assigned based upon crown closure percentages in overstorey (0-10)

<i>Code</i>	<i>Description</i>
D	Deciduous
C	Coniferous
DC	Deciduous/Coniferous
CD	Coniferous/Deciduous

**137. UCON**– Percentage coniferous crown closure in understorey.

<i>Code</i>	<i>Description</i>
##	Sum of conifer crown closure percentages in understorey (0-10)

**138. UDEC** – Percentage deciduous crown closure in understorey.

<i>Code</i>	<i>Description</i>
##	Sum of deciduous crown closure percentages in understorey (0-10)

**139. UCGRP**– Cover group assigned based upon crown closure percentages in understorey

<i>Code</i>	<i>Description</i>
D	Deciduous

C	Coniferous
DC	Deciduous/Coniferous
CD	Coniferous/Deciduous

<b>140. LEADCON – Leading conifer species in overstory layer</b>	
<i>Code</i>	<i>Description</i>
Fa	Alpine Fir – <i>Abies lasiocarpa</i>
Fb	Balsam Fir – <i>Abies balsamea</i>
Fd	Douglas Fir – <i>Pseudotsuga menziesii</i>
La	Alpine Larch – <i>Larix lyallii</i>
Lt	Tamarack – <i>Larix laricina</i>
Lw	Western Larch – <i>Larix occidentalis</i>
P	Pine
Pa	White-bark Pine – <i>Pinus albicaulis</i>
Pb	Balsam Poplar – <i>Populus balsamifera</i>
Pf	Limber Pine – <i>Pinus flexilis</i>
Pj	Jack Pine – <i>Pinus banksiana</i>
Pl	Lodgepole Pine – <i>Pinus contorta</i>
Sb	Black Spruce – <i>Picea mariana</i>
Se	Engelmann Spruce – <i>Picea engelmannii</i>
Sw	White Spruce – <i>Picea glauca</i>
“”	No Conifer Species

<b>141. ULEADCON – Leading conifer species in understory layer</b>	
<i>Code</i>	<i>Description</i>
Fa	Alpine Fir – <i>Abies lasiocarpa</i>
Fb	Balsam Fir – <i>Abies balsamea</i>
Fd	Douglas Fir – <i>Pseudotsuga menziesii</i>
La	Alpine Larch – <i>Larix lyallii</i>
Lt	Tamarack – <i>Larix laricina</i>
Lw	Western Larch – <i>Larix occidentalis</i>
P	Pine
Pa	White-bark Pine – <i>Pinus albicaulis</i>
Pb	Balsam Poplar – <i>Populus balsamifera</i>
Pf	Limber Pine – <i>Pinus flexilis</i>
Pj	Jack Pine – <i>Pinus banksiana</i>
Pl	Lodgepole Pine – <i>Pinus contorta</i>
Sb	Black Spruce – <i>Picea mariana</i>
Se	Engelmann Spruce – <i>Picea engelmannii</i>
Sw	White Spruce – <i>Picea glauca</i>
“”	No Conifer Species

<b>142. SECCON – Second leading conifer species.</b>	
<i>Code</i>	<i>Description</i>
Fa	Alpine Fir – <i>Abies lasiocarpa</i>
Fb	Balsam Fir – <i>Abies balsamea</i>
Fd	Douglas Fir – <i>Pseudotsuga menziesii</i>
La	Alpine Larch – <i>Larix lyallii</i>
Lt	Tamarack – <i>Larix laricina</i>
Lw	Western Larch – <i>Larix occidentalis</i>
P	Pine
Pa	White-bark Pine – <i>Pinus albicaulis</i>
Pb	Balsam Poplar – <i>Populus balsamifera</i>
Pf	Limber Pine – <i>Pinus flexilis</i>
Pj	Jack Pine – <i>Pinus banksiana</i>
Pl	Lodgepole Pine – <i>Pinus contorta</i>
Sb	Black Spruce – <i>Picea mariana</i>
Se	Engelmann Spruce – <i>Picea engelmannii</i>
Sw	White Spruce – <i>Picea glauca</i>
“”	No Conifer Species

<b>143. USECCON – Second leading conifer species.</b>	
<i>Code</i>	<i>Description</i>
Fa	Alpine Fir – <i>Abies lasiocarpa</i>
Fb	Balsam Fir – <i>Abies balsamea</i>
Fd	Douglas Fir – <i>Pseudotsuga menziesii</i>
La	Alpine Larch – <i>Larix lyallii</i>
Lt	Tamarack – <i>Larix laricina</i>
Lw	Western Larch – <i>Larix occidentalis</i>
P	Pine
Pa	White-bark Pine – <i>Pinus albicaulis</i>
Pb	Balsam Poplar – <i>Populus balsamifera</i>
Pf	Limber Pine – <i>Pinus flexilis</i>
Pj	Jack Pine – <i>Pinus banksiana</i>
Pl	Lodgepole Pine – <i>Pinus contorta</i>
Sb	Black Spruce – <i>Picea mariana</i>
Se	Engelmann Spruce – <i>Picea engelmannii</i>
Sw	White Spruce – <i>Picea glauca</i>
“”	No Conifer Species

<b>144. ST_NUM – Unique number identifier associated overstory stratum.</b>	
<i>Code</i>	<i>Description</i>
1	Deciduous Type – Natural
2	Deciduous Type – Natural
3	Deciduous Type – Natural

4	Deciduous Type – Natural
5	Deciduous Type – Natural
6	Deciduous Type – Natural
7	Deciduous Type – Natural
8	Deciduous/Coniferous Types - Natural
9	Deciduous/Coniferous Types - Natural
10	Deciduous/Coniferous and Coniferous/Deciduous Types - Natural
11	Coniferous/Deciduous Types - Natural
12	Coniferous/Deciduous Types - Natural
13	Coniferous Types - Natural
14	Coniferous Types - Natural
15	Coniferous Types - Natural
16	Coniferous Types - Natural
17	Coniferous Types - Natural
18	Coniferous Types - Natural
19	Coniferous Types - Natural
20	Coniferous Types - Natural
21	Coniferous Types - Natural
22	Deciduous Type with understory – Natural
23	Deciduous Type with understory – Natural
24	Deciduous Type with understory – Natural
25	Deciduous Type with understory – Natural
200	Non-forested cutblocks
201	Non-forested natural disturbance
300	Non-forested Vegetated
400	Anthropogenic Vegetated
500	Anthropogenic Non-vegetated
600	Naturally Non-vegetated
700	Unclassified

**145. UST\_NUM – Unique number identifier associated understory stratum.**

<i>Code</i>	<i>Description</i>
1	Deciduous Type – Natural
2	Deciduous Type – Natural
3	Deciduous Type – Natural
4	Deciduous Type – Natural
5	Deciduous Type – Natural
6	Deciduous Type – Natural
7	Deciduous Type – Natural
8	Deciduous/Coniferous Types - Natural
9	Deciduous/Coniferous Types - Natural
10	Deciduous/Coniferous and Coniferous/Deciduous Types - Natural
11	Coniferous/Deciduous Types - Natural
12	Coniferous/Deciduous Types - Natural

13	Coniferous Types - Natural
14	Coniferous Types - Natural
15	Coniferous Types - Natural
16	Coniferous Types - Natural
17	Coniferous Types - Natural
18	Coniferous Types - Natural
19	Coniferous Types - Natural
20	Coniferous Types - Natural
21	Coniferous Types - Natural
22	Deciduous Type with understory – Natural
23	Deciduous Type with understory – Natural
24	Deciduous Type with understory – Natural
25	Deciduous Type with understory – Natural
200	Non-forested cutblocks
201	Non-forested natural disturbance
300	Non-forested Vegetated
400	Anthropogenic Vegetated
500	Anthropogenic Non-vegetated
600	Naturally Non-vegetated
700	Unclassified

<b>146. NET_ST_NUM – Unique number identifier associated stratum selected to manage</b>	
<i>Code</i>	<i>Description</i>
1	Deciduous Type – Natural
2	Deciduous Type – Natural
3	Deciduous Type – Natural
4	Deciduous Type – Natural
5	Deciduous Type – Natural
6	Deciduous Type – Natural
7	Deciduous Type – Natural
8	Deciduous/Coniferous Types - Natural
9	Deciduous/Coniferous Types - Natural
10	Deciduous/Coniferous and Coniferous/Deciduous Types - Natural
11	Coniferous/Deciduous Types - Natural
12	Coniferous/Deciduous Types - Natural
13	Coniferous Types - Natural
14	Coniferous Types - Natural
15	Coniferous Types - Natural
16	Coniferous Types - Natural
17	Coniferous Types - Natural
18	Coniferous Types - Natural
19	Coniferous Types - Natural
20	Coniferous Types - Natural
21	Coniferous Types - Natural

22	Deciduous Type with understory – Natural
23	Deciduous Type with understory – Natural
24	Deciduous Type with understory – Natural
25	Deciduous Type with understory – Natural
200	Non-forested cutblocks
201	Non-forested natural disturbance
300	Non-forested Vegetated
400	Anthropogenic Vegetated
500	Anthropogenic Non-vegetated
600	Naturally Non-vegetated
700	Unclassified

<b>147. STRATA</b> – Unique code for overstory stratum.	
<i>Code</i>	<i>Description</i>
Aw-comp	Deciduous Type – Natural
Aw-S-O	Deciduous Type – Natural
Aw-S-C-N	Deciduous Type – Natural
Aw-S-C-S	Deciduous Type – Natural
Aw-Pj	Deciduous Type – Natural
AwS-N	Deciduous/Coniferous Types - Natural
AwS-S	Deciduous/Coniferous Types - Natural
MxPj	Coniferous/Deciduous Types - Natural
SAw-N	Coniferous/Deciduous Types - Natural
SAw-S	Coniferous/Deciduous Types - Natural
Lt	Coniferous Types - Natural
Sw-O	Coniferous Types - Natural
Sw-C-FM	Coniferous Types - Natural
Sw-C-G	Coniferous Types - Natural
Sb-O	Coniferous Types - Natural
Sb-C-FM	Coniferous Types - Natural
Sb-C-G	Coniferous Types - Natural
Pj-O-C-FM	Coniferous Types - Natural
Pj-C-G	Coniferous Types - Natural
Aw-U-FM	Deciduous Type with understory – Natural
Aw-U-G	Deciduous Type with understory – Natural
Aw-S-U-N	Deciduous Type with understory – Natural
Aw-S-U-S	Deciduous Type with understory – Natural
NFCC	Non forested cutblocks
NFALL	Non forested natural disturbance
NFV	Non-forested Vegetated
AV	Anthropogenic Vegetated
ANV	Anthropogenic Non-vegetated
NNV	Naturally Non-vegetated

<b>148. USTRATA – Unique code for understory stratum.</b>	
<i>Code</i>	<i>Description</i>
Aw-comp	Deciduous Type – Natural
Aw-S-O	Deciduous Type – Natural
Aw-S-C-N	Deciduous Type – Natural
Aw-S-C-S	Deciduous Type – Natural
Aw-Pj	Deciduous Type – Natural
AwS-N	Deciduous/Coniferous Types - Natural
AwS-S	Deciduous/Coniferous Types - Natural
MxPj	Coniferous/Deciduous Types - Natural
SAw-N	Coniferous/Deciduous Types - Natural
SAw-S	Coniferous/Deciduous Types - Natural
Lt	Coniferous Types - Natural
Sw-O	Coniferous Types - Natural
Sw-C-FM	Coniferous Types - Natural
Sw-C-G	Coniferous Types - Natural
Sb-O	Coniferous Types - Natural
Sb-C-FM	Coniferous Types - Natural
Sb-C-G	Coniferous Types - Natural
Pj-O-C-M	Coniferous Types - Natural
Pj-C-G	Coniferous Types - Natural
Aw-U-FM	Deciduous Type with understory – Natural
Aw-U-G	Deciduous Type with understory – Natural
Aw-S-U-N	Deciduous Type with understory – Natural
Aw-S-U-S	Deciduous Type with understory – Natural
NFCC	Non forested cutblocks
NFALL	Non forested natural disturbance
NFV	Non-forested Vegetated
AV	Anthropogenic Vegetated
ANV	Anthropogenic Non-vegetated
NNV	Naturally Non-vegetated

<b>149. NET_STRATA – Unique code for layer selected to manage -overstory or understory stratum</b>	
<i>Code</i>	<i>Description</i>
Aw-comp	Deciduous Type – Natural
Aw-S-O	Deciduous Type – Natural
Aw-S-C-N	Deciduous Type – Natural
Aw-S-C-S	Deciduous Type – Natural
Aw-Pj	Deciduous Type – Natural
AwS-N	Deciduous/Coniferous Types - Natural
AwS-S	Deciduous/Coniferous Types - Natural
MxPj	Coniferous/Deciduous Types - Natural
SAw-N	Coniferous/Deciduous Types - Natural

SAw-S	Coniferous/Deciduous Types - Natural
Lt	Coniferous Types - Natural
Sw-O	Coniferous Types - Natural
Sw-C-FM	Coniferous Types - Natural
Sw-C-G	Coniferous Types - Natural
Sb-O	Coniferous Types - Natural
Sb-C-FM	Coniferous Types - Natural
Sb-C-G	Coniferous Types - Natural
Pj-O-C-M	Coniferous Types - Natural
Pj-C-G	Coniferous Types - Natural
Aw-U-FM	Deciduous Type with understory – Natural
Aw-U-G	Deciduous Type with understory – Natural
Aw-S-U-N	Deciduous Type with understory – Natural
Aw-S-U-S	Deciduous Type with understory – Natural
NFCC	Non forested cutblocks
NFALL	Non forested natural disturbance
NFV	Non-forested Vegetated
AV	Anthropogenic Vegetated
ANV	Anthropogenic Non-vegetated
NNV	Naturally Non-vegetated

**150. NET\_DEN** – Current forest state associated with overstory

<i>Code</i>	<i>Description</i>
A	6 – 30%
B	31 – 50%
C	51 – 70%
D	71 – 100%
X	No density

**151. STATE** – Current forest state associated with overstory

<i>Code</i>	<i>Description</i>
NAT	Natural
DELAY	Regen delay
ADEN	‘A’ Density
NSR	Non sufficiently restocked
NONE	Non forested

**152. USTATE** – Current forest state associated with understory

<i>Code</i>	<i>Description</i>
NAT	Natural
DELAY	Regen delay
ADEN	‘A’ Density
NSR	Not sufficiently restocked
NONE	Non forested

<b>153. NET_STATE</b> – Current forest state associated with layer selected to manage	
<i>Code</i>	<i>Description</i>
NAT	Natural
DELAY	Regen delay
ADEN	‘A’ Density
NSR	Non sufficiently restocked
NONE	Non forested

<b>154. ST_USED</b> – Flag identifying the layer selected to manage	
<i>Code</i>	<i>Description</i>
OVER	Strata assignment based on overstory layer
UNDER	Strata assignment based on understory layer
“”	Non-forested

<b>155. NHA</b> – Net area in hectares.	
<i>Code</i>	<i>Description</i>
####	Area in hectares designated as [area] – [priha] – [horzha]

<b>156. PRIHA</b> – Private land reduction area in hectares.	
<i>Code</i>	<i>Description</i>
####	Area in hectares

<b>157. EX1</b> – Exclusions that prohibits timber harvesting.	
<i>Code</i>	<i>Description</i>
LIEGE	Liege Protected Area
PARK	Provincial Parks and Natural Areas
PNT	Protected Notations
PSP	Permanent Sample Plot Buffers (100m)
AB_RES	Aboriginal Reserve
GRA-RES	Grazing Reserve
EC_RES	Ecological Reserve
DRIV-BRK	River Breaks (Deciduous Only)
CRIV-BRK	River Breaks (Coniferous Only)
BOREAL	Boreal Sites
NOEXCL	No exclusion

<b>158. OEX2</b> – Overstory inoperable/isolated stands exclusions.	
<i>Code</i>	<i>Description</i>
SLOPE	Steep Slopes
PPRDall	Potentially Productive (burns, windfall, snags, etc)
PPRDcc	Potentially Productive (pre 91 cutblocks with no valid AVI forest label)
ISO	Isolated Stands
NFV	Non-Forest Vegetated

AV	Anthropogenic Vegetated
ANV	Anthropogenic Non-Vegetated
NNV	Naturally Non-Vegetated
UINDEX	Non-Commercial Site Index
UDENS	Non-Commercial Density
LARCH	Non-Commercial Species
USITE	Non-Commercial Site
“”	No exclusion

**159. UEX2– Understory inoperable/isolated stands exclusions.**

<i>Code</i>	<i>Description</i>
SLOPE	Steep Slopes
PPRDall	Potentially Productive (burns, windfall, snags, etc)
PPRDcc	Potentially Productive (pre 91 cutblocks with no valid AVI forest label)
ISO	Isolated Stands
NFV	Non-Forest Vegetated
AV	Anthropogenic Vegetated
ANV	Anthropogenic Non-Vegetated
NNV	Naturally Non-Vegetated
UINDEX	Non-Commercial Site Index
UDENS	Non-Commercial Density
LARCH	Non-Commercial Species
USITE	Non-Commercial Site
“”	No exclusion

**160. EX2– Net inoperable/isolated stands exclusions based on selected layer.**

<i>Code</i>	<i>Description</i>
SLOPE	Steep Slopes
PPRDall	Potentially Productive (burns, windfall, snags, etc)
PPRDcc	Potentially Productive (pre 91 cutblocks with no valid AVI forest label)
ISO	Isolated Stands
NFV	Non-Forest Vegetated
AV	Anthropogenic Vegetated
ANV	Anthropogenic Non-Vegetated
NNV	Naturally Non-Vegetated
UINDEX	Non-Commercial Site Index
UDENS	Non-Commercial Density
LARCH	Non-Commercial Species
USITE	Non-Commercial Site
NOEXCL	No exclusion

<b>161. EX3 –Watercourse buffer exclusions.</b>	
<i>Code</i>	<i>Description</i>
BUF	Watercourse Buffers – No Harvesting (lakes 100m, large permanent streams 60m, Small permanent streams 30m)
D15BUF	Watercourse Buffers – No Harvesting deciduous only (intermittent 15m)
HARVBUF	Conifer inside 15m intermittent watercourse buffer – Open for harvesting
RESBUF	Big Bend IRP Lake Buffers flagging area of restricted harvesting activity
NOEXCL	No exclusion

<b>162. HORZHA – Horizontal stand area reduction in hectares.</b>	
<i>Code</i>	<i>Description</i>
####	Area in hectares

<b>163. LANDBASE– Landbase assignment code.</b>	
<i>Code</i>	<i>Description</i>
CLB	Coniferous
DLB	Deciduous
XLB	No landbase

<b>164. TOWNSHIP– Township grid location.</b>	
<i>Code</i>	<i>Description</i>
XXXXXXX	Township, Range, Meridian

<b>165. NET_SEASON– Net summer ground based on layer used.</b>	
<i>Code</i>	<i>Description</i>
“”	Area designated as summer ground
win	Area designated as winter ground

<b>166. NET_INVENT– Inventory Location.</b>	
<i>Code</i>	<i>Description</i>
“j”	Inside FMU
“non”	Outside FMU

<b>167. PLAN_UNIT– Planning Unit.</b>	
<i>Code</i>	<i>Description</i>
XXXXX	Planning unit number
non	No planning unit

<b>168. CURR_AGE – Current age in years for overstory layer</b>	
<i>Code</i>	<i>Description</i>
####	Stands current age: 2000 - [origin]

<b>169. P_AGE</b> – Period age (5 year intervals) for overstory layer	
<i>Code</i>	<i>Description</i>
####	Stands period age (5 year intervals)

<b>170. UCURR_AGE</b> – Current age in years for understory layer	
<i>Code</i>	<i>Description</i>
####	Stands current age: 2000 - [uorigin]

<b>171. UP_AGE</b> – Period age (5 year intervals) for understory layer	
<i>Code</i>	<i>Description</i>
####	Stands period age (5 year intervals)

<b>172. NET_P_AGE</b> – Period age (5 year intervals) for layer selected to manage	
<i>Code</i>	<i>Description</i>
####	Stands period age (5 year intervals)

<b>173. NET_CURAGE</b> – Annual age in years – Legacy field, not used	
<i>Code</i>	<i>Description</i>
####	Stands annual age in years

<b>174. TSA_PERIOD</b> – Period age (5 year intervals) - Legacy field, not used	
<i>Code</i>	<i>Description</i>
####	TSA period age (5 year intervals)

<b>175. CC_YR</b> – Harvest Years for existing cutblocks	
<i>Code</i>	<i>Description</i>
####	Cut year

<b>176. CC_LB</b> – Landbase designation for existing cutblocks.	
<i>Code</i>	<i>Description</i>
C	Coniferous
D	Deciduous

<b>177. ISOL_FLAG</b> – Isolated Stand Flag	
<i>Code</i>	<i>Description</i>
0	Not Isolated
1	Isolated

<b>178. NET_LABEL – Netdown classification label.</b>	
<i>Code</i>	<i>Description</i>
0 AREA OUTSIDE FMA	See netdown doc.
1.a Provincial Park	See netdown doc.
11.a Forested Provincial Park	See netdown doc.
1.b Aboriginal Reserve	See netdown doc.
11.b Forested Aboriginal Reserve	See netdown doc.
1.c Ecological Reserve	See netdown doc.
11.c Forested Ecological Reserve	See netdown doc.
1.c2 PNTs	See netdown doc.
11.c2 Forested PNTs	See netdown doc.
1.d PSP Buffers	See netdown doc.
11.d Forested PSP Buffers	See netdown doc.
1.e Liege Area	See netdown doc.
11.e Forested Liege Area	See netdown doc.
1.f River Breaks	See netdown doc.
11.f Forested River Breaks	See netdown doc.
1.g Private Land Reduction	See netdown doc.
2.a Fire	See netdown doc.
2.b Oil and Gas	See netdown doc.
3.a Slope	See netdown doc.
33.a Slope	See netdown doc.
3.b Isolated Harvestable stands	See netdown doc.
3.c Non-Forested (CC)	See netdown doc.
3.d Non-Forested Natural Disturbance	See netdown doc.
3.e Non-Forested Vegetated	See netdown doc.
3.f Anthropogenic Vegetated	See netdown doc.
3.g Anthropogenic Non-Vegetated	See netdown doc.
3.h Naturally Non-Vegetated	See netdown doc.
3.i Non-Commercial TPR	See netdown doc.
3.j Non-Commercial Species	See netdown doc.
3.k Non-Commercial Stand Density	See netdown doc.
3.l Non-Commercial Site Index	See netdown doc.
3.m Horizontal Stand Adjustment	See netdown doc.
4.a Rivers	See netdown doc.
4.b Lakes	See netdown doc.
4.c Flooded Areas	See netdown doc.
5.a Water Course Buffer Productive	See netdown doc.
55.a Water Course Buffer Non-Productive	See netdown doc.
6.a Harvestable Deciduous	See netdown doc.
6.b Harvestable DC	See netdown doc.
6.c Harvestable CD	See netdown doc.
6.d Harvestable Coniferous	See netdown doc.
6.e Harvestable Deciduous with Coniferous Understory	See netdown doc.

**179. SW\_SPH**– Understory Conifer (Sw, Sb & Pj) Stems Per Hectare of Valid Deciduous with Conifer Understory Stands

<i>Code</i>	<i>Description</i>
0	Null
###	Combined understory conifer (Sw, Sb & Pj) stems/ha

**180. DU\_LEADCON**– Leading Understory Conifer for Valid Deciduous with Conifer Understory Stands

<i>Code</i>	<i>Description</i>
Fa	Alpine Fir – <i>Abies lasiocarpa</i>
Fb	Balsam Fir – <i>Abies balsamea</i>
Fd	Douglas Fir – <i>Pseudotsuga menziesii</i>
La	Alpine Larch – <i>Larix lyallii</i>
Lt	Tamarack – <i>Larix laricina</i>
Lw	Western Larch – <i>Larix occidentalis</i>
P	Pine
Pa	White-bark Pine – <i>Pinus albicaulis</i>
Pb	Balsam Poplar – <i>Populus balsamifera</i>
Pf	Limber Pine – <i>Pinus flexilis</i>
Pj	Jack Pine – <i>Pinus banksiana</i>
Pl	Lodgepole Pine – <i>Pinus contorta</i>
Sb	Black Spruce – <i>Picea mariana</i>
Se	Engelmann Spruce – <i>Picea engelmannii</i>
Sw	White Spruce – <i>Picea glauca</i>
“”	No Conifer Species

**181. NET\_DU**–Flag for Deciduous with Conifer Understory Stands with Greater than 600 Stems/Ha of Conifer (Sw, Sb & Pj) Understory and Lead Conifer is Sw, Sb or Pj

<i>Code</i>	<i>Description</i>
X	Not a harvestable DU type
Y	Combined understory conifer (Sw, Sb & Pj) $\geq$ 600 stems/ha
N	Combined understory conifer (Sw, Sb & Pj) $<$ 600 stems/ha

**182. NET\_CGRP** – Net cover group assigned based upon crown closure percents

<i>Code</i>	<i>Description</i>
X	No Cover Group
D	Deciduous
DC	Deciduous/Coniferous
CD	Coniferous/ Deciduous
Sw	Coniferous = White Spruce Leading
Sb	Coniferous = Black Spruce Leading
Pj	Coniferous = Pine Leading

**183. NET\_HEIGHT** – Net height in metres.

<i>Code</i>	<i>Description</i>
####	Height in metres





**ALBERTA  
PACIFIC**

**FOREST INDUSTRIES INC**

---

---

**Appendix X: Phase 3 Landbase Database Dictionary**

---

---

	<b>2003 Phase 3 Inventory Netdown Database (version 3.0)</b>	<b>Database Name</b>	
		FMU_p3gis	

<b>Originator:</b>	Created by Timberline Forest Inventory Consultants.
<b>Point of Contact:</b>	For further information contact    Jeff Christiansen Timberline Forest Inventory Consultants. Phone: (780) 425-8826 Dave Cheyne Alberta-Pacific Forest Products Inc Phone: (780) 525-8000
<b>Format of Data</b>	Visual Fox Pro

<b>Description</b>	
<b>Theme</b>	Phase 3 Inventory (PH3) Attribute Data; 2003 Netdown Attributes
<b>Keywords:</b>	
<b>Abstract:</b>	The PH3 attribute data describes the contents of the PH3 forest polygons
<b>Purpose:</b>	To provide a complete data directory structure.
<b>Supplemental Info:</b>	Information presented in these tables are directly associated with Alberta Pacific's 2003 netdown document-Appendix I.
<b>Cross Reference:</b>	Database contains several of the PH3 items as well as other redefined items required in the netdown procedure.
<b>Place</b>	Alberta-Pacific Forest Products Inc. Timberline Forest Inventory Consultants;
<b>Keywords:</b>	Forest Management Area (FMA); 2003 netdown.

**Entity and Attribute Information**

<b>Table Index</b>	<b>Defined Item Name</b>	<b>Type</b>	<b>Width</b>	<b>Decimal</b>
1	LOCKEDBY	Numeric	6	0
2	DATESTMP	Character	8	0
3	CORP_R	Character	3	0
4	F	Character	1	0
5	MU	Numeric	2	0
6	MGR	Character	1	0
7	TWP	Numeric	3	0
8	RG	Numeric	2	0
9	M	Numeric	1	0
10	PHOTOYR	Numeric	4	0
11	STAND	Numeric	4	0
12	A	Character	1	0
13	MCELL	Character	4	0
14	D	Character	1	0
15	H	Character	1	0
16	S1	Character	2	0
17	S2	Character	2	0
18	S3	Character	2	0
19	S4	Character	2	0
20	C	Character	1	0
21	VSR	Numeric	2	0
22	OG	Numeric	1	0
23	UD	Character	1	0
24	UH	Character	1	0
25	U1	Character	2	0
26	U2	Character	2	0
27	U3	Character	2	0
28	U4	Character	2	0
29	UC	Character	1	0
30	UG	Numeric	1	0
31	S	Character	1	0
32	SP	Character	2	0
33	STS	Character	3	0
34	Z	Numeric	1	0
35	GW	Character	1	0
36	VD	Numeric	1	0
37	WD	Numeric	1	0
38	CD	Numeric	1	0
39	BD	Numeric	1	0

<b>Table Index</b>	<b>Defined Item Name</b>	<b>Type</b>	<b>Width</b>	<b>Decimal</b>
40	ID	Numeric	1	0
41	T	Character	1	0
42	WATERSHED	Character	9	0
43	ORGN	Numeric	4	0
44	UORGN	Numeric	4	0
45	AREAHA	Numeric	10	1
46	AAC_ID	Character	5	0
47	USER1	Character	2	0
48	USER2	Numeric	2	0
49	USER3	Logical	1	0
50	LB	Numeric	1	0
51	AGEC1	Numeric	3	0
52	DEL	Character	1	0
53	YCLASS	Character	2	0
54	GRD1FACT	Numeric	6	5
55	GRD1	Numeric	15	6
56	GRD2	Numeric	15	6
57	CMPT	Numeric	2	0
58	L	Character	1	0
59	STRAT	Character	4	0
60	STY	Character	2	0
61	NETAREA	Numeric	18	6
62	CON	Integer	4	0
63	DEC	Integer	4	0
64	CGRP	Character	10	0
65	UCON	Integer	4	0
66	UDEC	Integer	4	0
67	UCGRP	Character	10	0
68	LEADCON	Character	10	0
69	ULEADCON	Character	10	0
70	SECCON	Character	10	0
71	USECCON	Character	10	0
72	ST_NUM	Integer	4	0
73	UST_NUM	Integer	4	0
74	NET_ST_NUM	Integer	4	0
75	STRATA	Character	10	0
76	USTRATA	Character	10	0
77	NET_STRATA	Character	12	0
78	NET_DEN	Character	6	0
79	STATE	Character	6	0
80	USTATE	Character	6	0
81	NET_STATE	Character	6	0
82	ST_USED	Character	6	0

<b>Table Index</b>	<b>Defined Item Name</b>	<b>Type</b>	<b>Width</b>	<b>Decimal</b>
83	AGE	Integer	4	0
84	UAGE	Integer	4	0
85	NHA	Numeric	18	6
86	PRIHA	Numeric	18	6
87	PNTHA	Numeric	18	6
88	EX1	Character	10	0
89	OEX2	Character	10	0
90	UEX2	Character	10	0
91	EX2	Character	10	0
92	EX3	Character	10	0
93	LNDUSE_PCT	Numeric	6	4
94	LNDUSE_RED	Numeric	6	4
95	LANDBASE	Character	5	0
96	TOWNSHIP	Character	5	0
97	NET_SEASON	Character	6	0
98	NET_INVENT	Character	5	0
99	PLAN_UNIT	Integer	4	0
100	LINK_KEY	Numeric	16	0
101	CURR_AGE	Integer	4	0
102	P_AGE	Integer	4	0
103	UCURR_AGE	Integer	4	0
104	UP_AGE	Integer	4	0
105	NET_P_AGE	Integer	4	0
106	NET_LABEL	Character	75	0
107	FMU	Character	6	0

<b>1. LOCKEDBY</b>	
<i>Code</i>	<i>Description</i>
##	Database Lock Code

<b>2. DATESTMP</b>	
<i>Code</i>	<i>Description</i>
""	Database Time Stamp

<b>3. CORP_R</b>	
<i>Code</i>	<i>Description</i>
""	Database Code

<b>4. F – Forest</b>	
<i>Code</i>	<i>Description</i>
A	Athabasca
B	Bow
C	Crow
E	Edson
F	Footner Lake
G	Grade Prairie
L	Lac la Biche
P	Peace River
R	Rocky/Clearwater
S	Slave Lake
W	Whitecourt

<b>5. MU – Management Unit.</b>	
<i>Code</i>	<i>Description</i>
####	Management unit number

<b>6. MGR – Manager.</b>	
<i>Code</i>	<i>Description</i>
XXX	Manager abbreviation

<b>7. TWP – Township</b>	
<i>Code</i>	<i>Description</i>
###	Township

<b>8. RG – Range</b>	
<i>Code</i>	<i>Description</i>
##	Range

<b>9. M – Meridian.</b>	
<i>Code</i>	<i>Description</i>
#	Meridian

<b>10. STAND – Stand Number</b>	
<i>Code</i>	<i>Description</i>
####	Always west of given meridian

<b>11. A – Stand Alpha</b>	
<i>Code</i>	<i>Description</i>
XXX	Letter designating subsection of a stand

<b>12. MCELL – Map Cell</b>	
<i>Code</i>	<i>Description</i>
XX	Map cell designation

<b>13. STY – Story level</b>	
<i>Code</i>	<i>Description</i>
O	Overstory
U	Understory

<b>14. D – Overstory Density Class</b>	
<i>Code</i>	<i>Description</i>
A	6 – 30%
B	31 – 50%
C	51 – 70%
D	71 – 100%

<b>15. H- Overstory Height Class.</b>	
<i>Code</i>	<i>Description</i>
0	0 – 6.0 m
1	6.1 – 12.0 m
2	12.1 – 18.0 m
3	18.1 – 24.0 m
4	24.1 – 30.0 m
5	> 30.0 m

<b>16. S1 – Overstory Species 1</b>	
<i>Code</i>	<i>Description</i>
A	Deciduous
AW	Trembling aspen
BR	Brush
BS	Barren soil

BU	Burn
BW	White birch
CC	Clear-cut
CL	Clearing
CS	Coniferous shrub
CU	Cultivated
DS	Deciduous shrub
FA	Alpine fir
FB	Balsam fir
FD	Douglas fir
FL	Flooded land
GL	Glacier
GR	Grass
IK	Insect kill
LT	Larch
OM	Open muskeg
P	Pine
PB	Balsam poplar
PJ	Jack pine
PL	Lodgepole pine
RB	Rock barren
SA	Sand
SB	Black spruce
SC	Scarified
SE	Engelmann spruce
SW	White spruce
TM	Treed muskeg
UC	Unclassified
VK	Various kill
WA	Water
WF	Windfall

<b>17. S2 – Overstory Species 2</b>	
<i>Code</i>	<i>Description</i>
A	Deciduous
AW	Trembling aspen
BR	Brush
BS	Barren soil
BU	Burn
BW	White birch
CC	Clear-cut
CL	Clearing
CS	Coniferous shrub

CU	Cultivated
DS	Deciduous shrub
FA	Alpine fir
FB	Balsam fir
FD	Douglas fir
FL	Flooded land
GL	Glacier
GR	Grass
IK	Insect kill
LT	Larch
OM	Open muskeg
P	Pine
PB	Balsam poplar
PJ	Jack pine
PL	Lodgepole pine
RB	Rock barren
SA	Sand
SB	Black spruce
SC	Scarified
SE	Engelmann spruce
SW	White spruce
TM	Treed muskeg
UC	Unclassified
VK	Various kill
WA	Water
WF	Windfall

<b>18. S3 – Overstory Species 3</b>	
<i>Code</i>	<i>Description</i>
A	Deciduous
AW	Trembling aspen
BR	Brush
BS	Barren soil
BU	Burn
BW	White birch
CC	Clear-cut
CL	Clearing
CS	Coniferous shrub
CU	Cultivated
DS	Deciduous shrub
FA	Alpine fir
FB	Balsam fir
FD	Douglas fir

FL	Flooded land
GL	Glacier
GR	Grass
IK	Insect kill
LT	Larch
OM	Open muskeg
P	Pine
PB	Balsam poplar
PJ	Jack pine
PL	Lodgepole pine
RB	Rock barren
SA	Sand
SB	Black spruce
SC	Scarified
SE	Engelmann spruce
SW	White spruce
TM	Treed muskeg
UC	Unclassified
VK	Various kill
WA	Water
WF	Windfall

<b>19. S4 – Overstory Species 4</b>	
<i>Code</i>	<i>Description</i>
A	Deciduous
AW	Trembling aspen
BR	Brush
BS	Barren soil
BU	Burn
BW	White birch
CC	Clear-cut
CL	Clearing
CS	Coniferous shrub
CU	Cultivated
DS	Deciduous shrub
FA	Alpine fir
FB	Balsam fir
FD	Douglas fir
FL	Flooded land
GL	Glacier
GR	Grass
IK	Insect kill
LT	Larch
OM	Open muskeg

P	Pine
PB	Balsam poplar
PJ	Jack pine
PL	Lodgepole pine
RB	Rock barren
SA	Sand
SB	Black spruce
SC	Scarified
SE	Engelmann spruce
SW	White spruce
TM	Treed muskeg
UC	Unclassified
VK	Various kill
WA	Water
WF	Windfall

<b>20. C – Commercialism</b>	
<i>Code</i>	<i>Description</i>
H	High un-commercial
L	Lumber
R	Round wood
U	Low un-commercial

<b>21. VSR – Volume Sampling Region</b>	
<i>Code</i>	<i>Description</i>
1	Lowland Bow/Crow
2	Lowland Rocky
3	Highland Rocky
4	Centre
5	Northern Foothills
6	Peace
7	Wabasca
8	North East
10	Footner
11	Highland Bow/Crow
12	Special Data

<b>22. OG – First Story Coded Cover Group</b>	
<i>Code</i>	<i>Description</i>
1	Productive coniferous
2	Productive coniferous Mixedwood
3	Productive deciduous Mixedwood
4	Productive deciduous

5	Potentially productive
6	Non-productive forested
7	Non-productive non-forested
8	Water
9	Unclassified

<b>23. UD - Understory Density Class</b>	
<i>Code</i>	<i>Description</i>
A	6 - 30%
B	31 - 50%
C	51 - 70%
D	71 - 100%

<b>24. UH - Understory Height Class</b>	
<i>Code</i>	<i>Description</i>
0	0 - 6.0 m
1	6.1 - 12.0 m
2	12.1 - 18.0 m
3	18.1 - 24.0 m
4	24.1 - 30.0 m
5	> 30.0 m

<b>25. U1 - Understory Species 1</b>	
<i>Code</i>	<i>Description</i>
A	Deciduous
AW	Trembling aspen
BR	Brush
BS	Barren soil
BU	Burn
BW	White birch
CC	Clear-cut
CL	Clearing
CS	Coniferous shrub
CU	Cultivated
DS	Deciduous shrub
FA	Alpine fir
FB	Balsam fir
FD	Douglas fir
FL	Flooded land
GL	Glacier
GR	Grass
IK	Insect kill
LT	Larch
OM	Open muskeg

P	Pine
PB	Balsam poplar
PJ	Jack pine
PL	Lodgepole pine
RB	Rock barren
SA	Sand
SB	Black spruce
SC	Scarified
SE	Engelmann spruce
SW	White spruce
TM	Treed muskeg
UC	Unclassified
VK	Various kill
WA	Water
WF	Windfall

<b>26. U2 - Understory Species 2</b>	
<i>Code</i>	<i>Description</i>
A	Deciduous
AW	Trembling aspen
BR	Brush
BS	Barren soil
BU	Burn
BW	White birch
CC	Clear-cut
CL	Clearing
CS	Coniferous shrub
CU	Cultivated
DS	Deciduous shrub
FA	Alpine fir
FB	Balsam fir
FD	Douglas fir
FL	Flooded land
GL	Glacier
GR	Grass
IK	Insect kill
LT	Larch
OM	Open muskeg
P	Pine
PB	Balsam poplar
PJ	Jack pine
PL	Lodgepole pine
RB	Rock barren
SA	Sand

SB	Black spruce
SC	Scarified
SE	Engelmann spruce
SW	White spruce
TM	Treed muskeg
UC	Unclassified
VK	Various kill
WA	Water
WF	Windfall

<b>27. U3 - Understory Species 3</b>	
<i>Code</i>	<i>Description</i>
A	Deciduous
AW	Trembling aspen
BR	Brush
BS	Barren soil
BU	Burn
BW	White birch
CC	Clear-cut
CL	Clearing
CS	Coniferous shrub
CU	Cultivated
DS	Deciduous shrub
FA	Alpine fir
FB	Balsam fir
FD	Douglas fir
FL	Flooded land
GL	Glacier
GR	Grass
IK	Insect kill
LT	Larch
OM	Open muskeg
P	Pine
PB	Balsam poplar
PJ	Jack pine
PL	Lodgepole pine
RB	Rock barren
SA	Sand
SB	Black spruce
SC	Scarified
SE	Engelmann spruce
SW	White spruce
TM	Treed muskeg
UC	Unclassified

VK	Various kill
WA	Water
WF	Windfall

<b>28. U4 - Understory Species 4</b>	
<i>Code</i>	<i>Description</i>
A	Deciduous
AW	Trembling aspen
BR	Brush
BS	Barren soil
BU	Burn
BW	White birch
CC	Clear-cut
CL	Clearing
CS	Coniferous shrub
CU	Cultivated
DS	Deciduous shrub
FA	Alpine fir
FB	Balsam fir
FD	Douglas fir
FL	Flooded land
GL	Glacier
GR	Grass
IK	Insect kill
LT	Larch
OM	Open muskeg
P	Pine
PB	Balsam poplar
PJ	Jack pine
PL	Lodgepole pine
RB	Rock barren
SA	Sand
SB	Black spruce
SC	Scarified
SE	Engelmann spruce
SW	White spruce
TM	Treed muskeg
UC	Unclassified
VK	Various kill
WA	Water
WF	Windfall

<b>29. UC - Understory commercialism</b>	
<i>Code</i>	<i>Description</i>
H	High un-commercial
L	Lumber
R	Round wood
U	Low un-commercial

<b>30. UG - Understory Coded Cover Group</b>	
<i>Code</i>	<i>Description</i>
1	Productive coniferous
2	Productive coniferous Mixedwood
3	Productive deciduous Mixedwood
4	Productive deciduous
5	Potentially productive
6	Non-productive forested
7	Non-productive non-forested
8	Water
9	Unclassified

<b>31. S - Site</b>	
<i>Code</i>	<i>Description</i>
G	Good
M	Medium
F	Fair

<b>32. SP - Slope</b>	
<i>Code</i>	<i>Description</i>
00 or blank	Slope percent unknown
45	Slope greater than or equal to 45 %

<b>33. STS - Land Status</b>	
<i>Code</i>	<i>Description</i>
<b><i>First Character</i></b>	
C	Federal agency
E	Environment
F or blank	Forest service (FLW)
G	Energy
H	Housing and public works
M	Municipal affairs
L	Public lands (FLW)
P	Private holdings
R	Recreation and parks
S	Social development
T	Transportation

U	Education
X	Town sites (incorporated)
<i>Second two letters identifies type of land holding</i>	
CP	Cache Percotte Forest
ER	Ecological reserve
ES	Experimental
FD	Reserved area
FM	Forest management agreement
FO	DTA overlap with FMA
FR	Provisional reserve
FW	Community farm woodlot
GR	Grazing reserve
IR	Indian reserve
LZ	Forest Land Use Zone
MC	Metis colony
MT	Miscellaneous timber use
ND	Air weapons range
PA	Patent
PK	Park
QA	Quota
RA	Recreation area
UA	University of Alberta forest
UN	Unspecified (crown land in "O" units)
WA	Wilderness area
WP	Wildland park

<b>34. Z – ESIP Zone.</b>	
<i>Code</i>	<i>Description</i>
1	Prime protection
2	Critical wildlife
3	Special use
4	General recreation
5	Multiple use
6	Agriculture
7	Industrial
8	Facility
9	Outside

<b>35. GW – Green or White Area</b>	
<i>Code</i>	<i>Description</i>
G	Green area
W	White area

<b>36. VD - Miscellaneous Disturbance Factor</b>	
<i>Code</i>	<i>Description</i>
1	1 to 25% loss of stand volume vigour
2	26 to 50% loss of stand volume vigour
3	51 to 75% loss of stand volume vigour
4	76% loss of stand volume vigour

<b>37. WD - Wind Disturbance Factor</b>	
<i>Code</i>	<i>Description</i>
1	1 to 25% loss of stand volume vigour
2	26 to 50% loss of stand volume vigour
3	51 to 75% loss of stand volume vigour
4	76% loss of stand volume vigour

<b>38. CD - Cut Disturbance Factor</b>	
<i>Code</i>	<i>Description</i>
1	1 to 25% loss of stand volume vigour
2	26 to 50% loss of stand volume vigour
3	51 to 75% loss of stand volume vigour
4	76% loss of stand volume vigour

<b>39. BD - Burn Disturbance Factor</b>	
<i>Code</i>	<i>Description</i>
1	1 to 25% loss of stand volume vigour
2	26 to 50% loss of stand volume vigour
3	51 to 75% loss of stand volume vigour
4	76% loss of stand volume vigour

<b>40. ID - Insect and Disease Disturbance Factor</b>	
<i>Code</i>	<i>Description</i>
1	1 to 25% loss of stand volume vigour
2	26 to 50% loss of stand volume vigour
3	51 to 75% loss of stand volume vigour
4	76% loss of stand volume vigour

<b>41. T - Treatment Condition</b>	
<i>Code</i>	<i>Description</i>
A	Site improved (fertilization, drainage, etc.)
B	Seedbed prepared (scarification, weed control, etc.)
C	Planted and/or seeded (regardless of success)
D	Thinned
S	Stagnant (not realizing the site's productive potential due to overstocking and stagnation)
T	Terminating (decadent, visible loss of gross volume due to over maturity)

<b>42. WATERSHED - Watershed Basin</b>	
<i>Code</i>	<i>Description</i>
####	Basin number

<b>43. ORGN - Overstory Origin</b>	
<i>Code</i>	<i>Description</i>
####	Year of origin

<b>44. UORGN - Understory Origin</b>	
<i>Code</i>	<i>Description</i>
####	Year of origin

<b>45. AREAHA - Gross Stand Area (Hectares)</b>	
<i>Code</i>	<i>Description</i>
#####	Gross Area (Note: one decimal implied)

<b>46. AAC_ID</b>	
<i>Code</i>	<i>Description</i>
####	Landpro Code

<b>47. USER1</b>	
<i>Code</i>	<i>Description</i>
####	Landpro Code

<b>48. USER2</b>	
<i>Code</i>	<i>Description</i>
####	Landpro Code

<b>49. USER3</b>	
<i>Code</i>	<i>Description</i>
####	Landpro Code

<b>50. LB</b>	
<i>Code</i>	<i>Description</i>
####	Landpro Code

<b>51. AGE1</b>	
<i>Code</i>	<i>Description</i>
####	Landpro Code

<b>52. DEL</b>	
<i>Code</i>	<i>Description</i>
####	Landpro Code

<b>53. YCLASS</b>	
<i>Code</i>	<i>Description</i>
####	Landpro Code

<b>54. GRD1FAC</b>	
<i>Code</i>	<i>Description</i>
####	Landpro Code

<b>55. GRD1</b>	
<i>Code</i>	<i>Description</i>
####	Landpro Code

<b>56. GRD2</b>	
<i>Code</i>	<i>Description</i>
####	Landpro Code

<b>57. CMPT</b>	
<i>Code</i>	<i>Description</i>
####	Landpro Code

<b>58. L</b>	
<i>Code</i>	<i>Description</i>
####	Landpro Code

<b>59. STRAT</b>	
<i>Code</i>	<i>Description</i>
####	Landpro Code

<b>60. STY</b>	
<i>Code</i>	<i>Description</i>
####	Landpro Code

<b>61. NETAREA</b>	
<i>Code</i>	<i>Description</i>
####	Net Area

<b>62. CON – Percentage coniferous crown closure in overstory.</b>	
<i>Code</i>	<i>Description</i>
##	Sum of conifer crown closure percentages in overstory (0-10)

<b>63. DEC – Percentage deciduous crown closure in overstory.</b>	
<i>Code</i>	<i>Description</i>
##	Sum of deciduous crown closure percentages in overstory

<b>64. CGRP</b> – Cover group assigned based upon crown closure percentages in overstory (0-10)	
<i>Code</i>	<i>Description</i>
D	Deciduous
C	Coniferous
DC	Deciduous/Coniferous
CD	Coniferous/Deciduous

<b>65. UCON</b> – Percentage coniferous crown closure in understory.	
<i>Code</i>	<i>Description</i>
##	Sum of conifer crown closure percentages in understory (0-10)

<b>66. UDEC</b> – Percentage deciduous crown closure in understory.	
<i>Code</i>	<i>Description</i>
##	Sum of deciduous crown closure percentages in understory (0-10)

<b>67. UCGRP</b> – Cover group assigned based upon crown closure percentages in understory	
<i>Code</i>	<i>Description</i>
D	Deciduous
C	Coniferous
DC	Deciduous/Coniferous
CD	Coniferous/Deciduous

<b>68. LEADCON</b> – Leading conifer species in overstory layer	
<i>Code</i>	<i>Description</i>
Fa	Alpine Fir – <i>Abies lasiocarpa</i>
Fb	Balsam Fir – <i>Abies balsamea</i>
Fd	Douglas Fir – <i>Pseudotsuga menziesii</i>
La	Alpine Larch – <i>Larix lyallii</i>
Lt	Tamarack – <i>Larix laricina</i>
Lw	Western Larch – <i>Larix occidentalis</i>
P	Pine
Pa	White-bark Pine – <i>Pinus albicaulis</i>
Pb	Balsam Poplar – <i>Populus balsamifera</i>
Pf	Limber Pine – <i>Pinus flexilis</i>
Pj	Jack Pine – <i>Pinus banksiana</i>
Pl	Lodgepole Pine – <i>Pinus contorta</i>
Sb	Black Spruce – <i>Picea mariana</i>
Se	Engelmann Spruce – <i>Picea engelmannii</i>
Sw	White Spruce – <i>Picea glauca</i>
""	No Conifer Species

<b>69. ULEADCON – Leading conifer species in understory layer</b>	
<i>Code</i>	<i>Description</i>
Fa	Alpine Fir – <i>Abies lasiocarpa</i>
Fb	Balsam Fir – <i>Abies balsamea</i>
Fd	Douglas Fir – <i>Pseudotsuga menziesii</i>
La	Alpine Larch – <i>Larix lyallii</i>
Lt	Tamarack – <i>Larix laricina</i>
Lw	Western Larch – <i>Larix occidentalis</i>
P	Pine
Pa	White-bark Pine – <i>Pinus albicaulis</i>
Pb	Balsam Poplar – <i>Populus balsamifera</i>
Pf	Limber Pine – <i>Pinus flexilis</i>
Pj	Jack Pine – <i>Pinus banksiana</i>
Pl	Lodgepole Pine – <i>Pinus contorta</i>
Sb	Black Spruce – <i>Picea mariana</i>
Se	Engelmann Spruce – <i>Picea engelmannii</i>
Sw	White Spruce – <i>Picea glauca</i>
""	No Conifer Species

<b>70. SECCON – Second leading conifer species.</b>	
<i>Code</i>	<i>Description</i>
Fa	Alpine Fir – <i>Abies lasiocarpa</i>
Fb	Balsam Fir – <i>Abies balsamea</i>
Fd	Douglas Fir – <i>Pseudotsuga menziesii</i>
La	Alpine Larch – <i>Larix lyallii</i>
Lt	Tamarack – <i>Larix laricina</i>
Lw	Western Larch – <i>Larix occidentalis</i>
P	Pine
Pa	White-bark Pine – <i>Pinus albicaulis</i>
Pb	Balsam Poplar – <i>Populus balsamifera</i>
Pf	Limber Pine – <i>Pinus flexilis</i>
Pj	Jack Pine – <i>Pinus banksiana</i>
Pl	Lodgepole Pine – <i>Pinus contorta</i>
Sb	Black Spruce – <i>Picea mariana</i>
Se	Engelmann Spruce – <i>Picea engelmannii</i>
Sw	White Spruce – <i>Picea glauca</i>
""	No Conifer Species

<b>71. USECCON – Second leading conifer species.</b>	
<i>Code</i>	<i>Description</i>
Fa	Alpine Fir – <i>Abies lasiocarpa</i>
Fb	Balsam Fir – <i>Abies balsamea</i>
Fd	Douglas Fir – <i>Pseudotsuga menziesii</i>
La	Alpine Larch – <i>Larix lyallii</i>
Lt	Tamarack – <i>Larix laricina</i>

Lw	Western Larch – Larix occidentalis
P	Pine
Pa	White-bark Pine – Pinus albicaulis
Pb	Balsam Poplar – Populus balsamifera
Pf	Limber Pine – Pinus flexilis
Pj	Jack Pine – Pinus banksiana
Pl	Lodgepole Pine – Pinus contorta
Sb	Black Spruce – Picea mariana
Se	Engelmann Spruce – Picea engelmannii
Sw	White Spruce – Picea glauca
""	No Conifer Species

<b>72. ST_NUM</b> – Unique number identifier associated overstory stratum.	
<i>Code</i>	<i>Description</i>
1	Deciduous Type – Natural
2	Deciduous Type – Natural
3	Deciduous Type – Natural
4	Deciduous Type – Natural
5	Deciduous Type – Natural
6	Deciduous Type – Natural
7	Deciduous Type – Natural
8	Deciduous/Coniferous Types - Natural
9	Deciduous/Coniferous Types - Natural
10	Deciduous/Coniferous and Coniferous/Deciduous Types - Natural
11	Coniferous/Deciduous Types - Natural
12	Coniferous/Deciduous Types - Natural
13	Coniferous Types - Natural
14	Coniferous Types - Natural
15	Coniferous Types - Natural
16	Coniferous Types - Natural
17	Coniferous Types - Natural
18	Coniferous Types - Natural
19	Coniferous Types - Natural
20	Coniferous Types - Natural
21	Coniferous Types - Natural
22	Deciduous Type with understory – Natural
23	Deciduous Type with understory – Natural
24	Deciduous Type with understory – Natural
25	Deciduous Type with understory – Natural
200	Non-forested cutblocks
201	Non-forested natural disturbance
300	Non-forested Vegetated
400	Anthropogenic Vegetated
500	Anthropogenic Non-vegetated

600	Naturally Non-vegetated
700	Unclassified

<b>73. UST_NUM</b> – Unique number identifier associated understory stratum.	
<i>Code</i>	<i>Description</i>
1	Deciduous Type – Natural
2	Deciduous Type – Natural
3	Deciduous Type – Natural
4	Deciduous Type – Natural
5	Deciduous Type – Natural
6	Deciduous Type – Natural
7	Deciduous Type – Natural
8	Deciduous/Coniferous Types - Natural
9	Deciduous/Coniferous Types - Natural
10	Deciduous/Coniferous and Coniferous/Deciduous Types - Natural
11	Coniferous/Deciduous Types - Natural
12	Coniferous/Deciduous Types - Natural
13	Coniferous Types - Natural
14	Coniferous Types - Natural
15	Coniferous Types - Natural
16	Coniferous Types - Natural
17	Coniferous Types - Natural
18	Coniferous Types - Natural
19	Coniferous Types - Natural
20	Coniferous Types - Natural
21	Coniferous Types - Natural
22	Deciduous Type with understory – Natural
23	Deciduous Type with understory – Natural
24	Deciduous Type with understory – Natural
25	Deciduous Type with understory – Natural
200	Non-forested cutblocks
201	Non-forested natural disturbance
300	Non-forested Vegetated
400	Anthropogenic Vegetated
500	Anthropogenic Non-vegetated
600	Naturally Non-vegetated
700	Unclassified

<b>74. NET_ST_NUM</b> – Unique number identifier associated stratum selected to manage	
<i>Code</i>	<i>Description</i>
1	Deciduous Type – Natural
2	Deciduous Type – Natural
3	Deciduous Type – Natural
4	Deciduous Type – Natural

5	Deciduous Type - Natural
6	Deciduous Type - Natural
7	Deciduous Type - Natural
8	Deciduous/Coniferous Types - Natural
9	Deciduous/Coniferous Types - Natural
10	Deciduous/Coniferous and Coniferous/Deciduous Types - Natural
11	Coniferous/Deciduous Types - Natural
12	Coniferous/Deciduous Types - Natural
13	Coniferous Types - Natural
14	Coniferous Types - Natural
15	Coniferous Types - Natural
16	Coniferous Types - Natural
17	Coniferous Types - Natural
18	Coniferous Types - Natural
19	Coniferous Types - Natural
20	Coniferous Types - Natural
21	Coniferous Types - Natural
22	Deciduous Type with understory - Natural
23	Deciduous Type with understory - Natural
24	Deciduous Type with understory - Natural
25	Deciduous Type with understory - Natural
200	Non-forested cutblocks
201	Non-forested natural disturbance
300	Non-forested Vegetated
400	Anthropogenic Vegetated
500	Anthropogenic Non-vegetated
600	Naturally Non-vegetated
700	Unclassified

<b>75. STRATA</b> - Unique code for overstory stratum.	
<i>Code</i>	<i>Description</i>
Aw-comp	Deciduous Type - Natural
Aw-S-O	Deciduous Type - Natural
Aw-S-C-N	Deciduous Type - Natural
Aw-S-C-S	Deciduous Type - Natural
Aw-Pj	Deciduous Type - Natural
AwS-N	Deciduous/Coniferous Types - Natural
AwS-S	Deciduous/Coniferous Types - Natural
MxPj	Coniferous/Deciduous Types - Natural
SAw-N	Coniferous/Deciduous Types - Natural
SAw-S	Coniferous/Deciduous Types - Natural
Lt	Coniferous Types - Natural
Sw-O	Coniferous Types - Natural
Sw-C-FM	Coniferous Types - Natural

Sw-C-G	Coniferous Types - Natural
Sb-O	Coniferous Types - Natural
Sb-C-FM	Coniferous Types - Natural
Sb-C-G	Coniferous Types - Natural
Pj-O-C-FM	Coniferous Types - Natural
Pj-C-G	Coniferous Types - Natural
Aw-U-FM	Deciduous Type with understory - Natural
Aw-U-G	Deciduous Type with understory - Natural
Aw-S-U-N	Deciduous Type with understory - Natural
Aw-S-U-S	Deciduous Type with understory - Natural
NFCC	Non forested cutblocks
NFALL	Non forested natural disturbance
NFV	Non-forested Vegetated
AV	Anthropogenic Vegetated
ANV	Anthropogenic Non-vegetated
NNV	Naturally Non-vegetated

**76. USTRATA – Unique code for understory stratum.**

<i>Code</i>	<i>Description</i>
Aw-comp	Deciduous Type - Natural
Aw-S-O	Deciduous Type - Natural
Aw-S-C-N	Deciduous Type - Natural
Aw-S-C-S	Deciduous Type - Natural
Aw-Pj	Deciduous Type - Natural
AwS-N	Deciduous/Coniferous Types - Natural
AwS-S	Deciduous/Coniferous Types - Natural
MxPj	Coniferous/Deciduous Types - Natural
SAw-N	Coniferous/Deciduous Types - Natural
SAw-S	Coniferous/Deciduous Types - Natural
Lt	Coniferous Types - Natural
Sw-O	Coniferous Types - Natural
Sw-C-FM	Coniferous Types - Natural
Sw-C-G	Coniferous Types - Natural
Sb-O	Coniferous Types - Natural
Sb-C-FM	Coniferous Types - Natural
Sb-C-G	Coniferous Types - Natural
Pj-O-C-FM	Coniferous Types - Natural
Pj-C-G	Coniferous Types - Natural
Aw-U-FM	Deciduous Type with understory - Natural
Aw-U-G	Deciduous Type with understory - Natural
Aw-S-U-N	Deciduous Type with understory - Natural
Aw-S-U-S	Deciduous Type with understory - Natural
NFCC	Non forested cutblocks
NFALL	Non forested natural disturbance
NFV	Non-forested Vegetated

AV	Anthropogenic Vegetated
ANV	Anthropogenic Non-vegetated
NNV	Naturally Non-vegetated

<b>77. NET_STRATA - Unique code for layer selected to manage -overstory or understory stratum</b>	
<i>Code</i>	<i>Description</i>
Aw-comp	Deciduous Type - Natural
Aw-S-O	Deciduous Type - Natural
Aw-S-C-N	Deciduous Type - Natural
Aw-S-C-S	Deciduous Type - Natural
Aw-Pj	Deciduous Type - Natural
AwS-N	Deciduous/Coniferous Types - Natural
AwS-S	Deciduous/Coniferous Types - Natural
MxPj	Coniferous/Deciduous Types - Natural
SAw-N	Coniferous/Deciduous Types - Natural
SAw-S	Coniferous/Deciduous Types - Natural
Lt	Coniferous Types - Natural
Sw-O	Coniferous Types - Natural
Sw-C-FM	Coniferous Types - Natural
Sw-C-G	Coniferous Types - Natural
Sb-O	Coniferous Types - Natural
Sb-C-FM	Coniferous Types - Natural
Sb-C-G	Coniferous Types - Natural
Pj-O-C-FM	Coniferous Types - Natural
Pj-C-G	Coniferous Types - Natural
Aw-U-FM	Deciduous Type with understory - Natural
Aw-U-G	Deciduous Type with understory - Natural
Aw-S-U-N	Deciduous Type with understory - Natural
Aw-S-U-S	Deciduous Type with understory - Natural
NFCC	Non forested cutblocks
NFALL	Non forested natural disturbance
NFV	Non-forested Vegetated
AV	Anthropogenic Vegetated
ANV	Anthropogenic Non-vegetated
NNV	Naturally Non-vegetated

<b>78. Net Den- Current forest state associated with overstory</b>	
<i>Code</i>	<i>Description</i>
A	6 - 30%
B	31 - 50%
C	51 - 70%
D	71 - 100%
X	No density

<b>79. STATE</b> - Unique code for layer selected to manage -overstory or understory density	
<i>Code</i>	<i>Description</i>
NAT	Natural
DELAY	Regen delay
ADEN	'A' Density
NSR	Non sufficiently restocked
NONE	Non forested

<b>80. USTATE</b> - Current forest state associated with understory	
<i>Code</i>	<i>Description</i>
NAT	Natural
DELAY	Regen delay
ADEN	'A' Density
NSR	Non sufficiently restocked
NONE	Non forested

<b>81. NET_STATE</b> - Current forest state associated with layer selected to manage	
<i>Code</i>	<i>Description</i>
NAT	Natural
DELAY	Regen delay
ADEN	'A' Density
NSR	Non sufficiently restocked
NONE	Non forested

<b>82. ST_USED</b> - Flag identifying the layer selected to manage	
<i>Code</i>	<i>Description</i>
OVER	Strata assignment based on overstory layer
UNDER	Strata assignment based on understory layer
""	Non-forested

<b>83. AGE</b> - Overstory age	
<i>Code</i>	<i>Description</i>
0	Added for consistency base on AVI

<b>84. UAGE</b> - Understory age	
<i>Code</i>	<i>Description</i>
0	Added for consistency base on AVI

<b>85. NHA</b> - Net area in hectares.	
<i>Code</i>	<i>Description</i>
####	Area in hectares designated as [area] - [priha] - [horzha]

<b>86. PRIHA - Private land reduction area in hectares.</b>	
<i>Code</i>	<i>Description</i>
####	Added for consistency base on AVI

<b>87. PNTHA - Protective notation land reduction area in hectares.</b>	
<i>Code</i>	<i>Description</i>
####	Added for consistency base on AVI

<b>88. EX1- Exclusions that prohibits timber harvesting.</b>	
<i>Code</i>	<i>Description</i>
EC-RES	Ecological Reserve
PARK	Provincial Parks and Natural Areas
PRIVATE	Private Land
GRA-RES	Grazing reserve
AB-RES	Aboriginal reserve
UNCLASS	Unspecified crown land in white area
NOEXCL	No exclusion

<b>89. OEX2- Overstory inoperable/isolated stands exclusions.</b>	
<i>Code</i>	<i>Description</i>
SLOPE	Steep Slopes
NFCC	Potentially Productive (pre 91 cutblocks wit no valid AVI forest label)
NFALL	Potentially Productive (burns, windfall, snags, etc)
UNCL	Unclassed
NFV	Non-Forest Vegetated
AV	Anthropogenic Vegetated
ANV	Anthropogenic Non-Vegetated
NNV	Naturally Non-Vegetated
UINDEX	Non-Commercial Site Index
UDENS	Non-Commercial Density
LARCH	Non-Commercial Species
USITE	Non-Commercial Site
""	No exclusion

<b>90. UEX2- Understory inoperable/isolated stands exclusions.</b>	
<i>Code</i>	<i>Description</i>
SLOPE	Steep Slopes
NFCC	Potentially Productive (pre 91 cutblocks wit no valid AVI forest label)
NFALL	Potentially Productive (burns, windfall, snags, etc)
UNCL	Unclassed
NFV	Non-Forest Vegetated
AV	Anthropogenic Vegetated
ANV	Anthropogenic Non-Vegetated
NNV	Naturally Non-Vegetated

UINDEX	Non-Commercial Site Index
UDENS	Non-Commercial Density
LARCH	Non-Commercial Species
USITE	Non-Commercial Site
""	No exclusion

<b>91. EX2- Net inoperable stands exclusions based on selected layer.</b>	
<i>Code</i>	<i>Description</i>
OIL	Oil and Gas Deletion Areas
SLOPE	Steep Slopes
NFCC	Potentially Productive (pre 91 cutblocks wit no valid AVI forest label)
NFALL	Potentially Productive (burns, windfall, snags, etc)
UNCL	Unclassed
NFV	Non-Forest Vegetated
AV	Anthropogenic Vegetated
ANV	Anthropogenic Non-Vegetated
NNV	Naturally Non-Vegetated
UINDEX	Non-Commercial Site Index
UDENS	Non-Commercial Density
LARCH	Non-Commercial Species
USITE	Non-Commercial Site
NOEXCL	No exclusion

<b>92. EX3 -Watercourse buffer exclusions.</b>	
<i>Code</i>	<i>Description</i>
NOBUF	No exclusion

<b>93. LNDUSE_PCT- Percentage reduction to account for oil/gas</b>	
<i>Code</i>	<i>Description</i>
%	Percent removal

<b>94. LNDUSE_RED- Percentage reduction to account for oil/gas</b>	
<i>Code</i>	<i>Description</i>
###	Hectares removal

<b>95. LANDBASE- Landbase assignment code.</b>	
<i>Code</i>	<i>Description</i>
CLB	Coniferous
DLB	Deciduous
XLB	No landbase

<b>96. TOWNSHIP- Township grid location.</b>	
<i>Code</i>	<i>Description</i>
XXXXXXX	Township, Range, Meridian

<b>97. NET_SEASON</b> - Net summer ground based on layer used.	
<i>Code</i>	<i>Description</i>
NUL	Null value

<b>98. NET_INVENT</b> - Inventory type.	
<i>Code</i>	<i>Description</i>
NON	To keep consistent with AVI netdown procedures

<b>99. PLAN_UNIT</b> - Planning Unit.	
<i>Code</i>	<i>Description</i>
Non/999	No planning unit

<b>100. LINK_KEY</b> - Primary key used to join spatial coverages with database files.	
<i>Code</i>	<i>Description</i>
#####	Unique number

<b>101. CURR_AGE</b> - Current age in years for overstory layer	
<i>Code</i>	<i>Description</i>
####	Stands current age: 2000 - [origin]

<b>102. P_AGE</b> - Period age (5 year intervals) for overstory layer	
<i>Code</i>	<i>Description</i>
####	Stands period age (5 year intervals)

<b>103. UCURR_AGE</b> - Current age in years for understory layer	
<i>Code</i>	<i>Description</i>
####	Stands current age: 2000 - [uorigin]

<b>104. UP_AGE</b> - Period age (5 year intervals) for understory layer	
<i>Code</i>	<i>Description</i>
####	Stands period age (5 year intervals)

<b>105. NET_P_AGE</b> - Period age (5 year intervals) for layer selected to manage	
<i>Code</i>	<i>Description</i>
####	Stands period age (5 year intervals)

<b>106. NET_LABEL</b> - Netdown classification label.	
<i>Code</i>	<i>Description</i>
0 AREA OUTSIDE FMA	See netdown doc.
1.a Provincial Park	See netdown doc.
1.b Aboriginal Reserve	See netdown doc.
1.c Ecological Reserve	See netdown doc.

1.c2 PNTs	See netdown doc.
1.d PSP Buffers	See netdown doc.
1.e Liege Area	See netdown doc.
1.f River Breaks	See netdown doc.
1.g Private Land	See netdown doc.
11.a Forested Provincial Park	See netdown doc.
11.b Forested Aboriginal Reserve	See netdown doc.
11.c Forested Ecological Reserve	See netdown doc.
11.c2 Forested PNTs	See netdown doc.
11.d Forested PSP Buffers	See netdown doc.
11.e Forested Liege Area	See netdown doc.
11.f Forested River Breaks	See netdown doc.
11.g Forested Private Land	See netdown doc.
2.a Fire	See netdown doc.
2.b Oil and Gas	See netdown doc.
2.c Oil-AP	See netdown doc.
2.d Oil-Gov	See netdown doc.
3.a Slope	See netdown doc.
3.b Isolated Harvestable stands	See netdown doc.
3.c Non-Forested (CC)	See netdown doc.
3.d Non-Forested Natural Disturbance	See netdown doc.
3.e Non-Forested Vegetated	See netdown doc.
3.f Anthropogenic Vegetated	See netdown doc.
3.g Anthropogenic Non-Vegetated	See netdown doc.
3.h Naturally Non-Vegetated	See netdown doc.
3.i Non-Commercial TPR	See netdown doc.
3.j Non-Commercial Species	See netdown doc.
3.k Non-Commercial Stand Density	See netdown doc.
3.l Non-Commercial Site Index	See netdown doc.
3.m Horizontal Stand Adjustment	See netdown doc.
33.a Slope	See netdown doc.
4.a Rivers	See netdown doc.
4.b Lakes	See netdown doc.
4.c Flooded Areas	See netdown doc.
5.a Water Course Buffer Productive	See netdown doc.
55.a Water Course Buffer Non-Productive	See netdown doc.
6.a Harvestable Deciduous	See netdown doc.
6.b Harvestable DC	See netdown doc.
6.c Harvestable CD	See netdown doc.
6.d Harvestable Coniferous	See netdown doc.
6.e Harvestable Deciduous with Coniferous Understory	See netdown doc.
6.f M.O.F. Blocks	See netdown doc.

<b>107. FMU - Forest Management Unit</b>	
<i>Code</i>	<i>Description</i>
XX	FMU Code

